

SEPT 1982

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THEMATIC MAPPER



(E83-10265) THEMATIC MAPPER PROTOFLIGHT
MODEL PRESHPMENT REVIEW DATA PACKAGE.
VOLUME 4: APPENDIX. PART A: MULTIPLEXER
DATA BOOK 2 Final Report (Santa Barbara
Research Center) 713 p HC A99/MF A01

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Prepared for
GODDARD SPACE FLIGHT CENTER
Greenbelt, Maryland 20771
CONTRACT NAS 5-24200

FLIGHT MODEL
PRESHPMENT REVIEW
DATA PACKAGE
VOLUME IV - APPENDIX
PART A - MULTIPLEXER DATA - BOOK
Article IV - 3A



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PROTOFLIGHT MODEL
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APPENDIX A

MULTIPLEXER PERFORMANCE DATA

The enclosed data is from the final performance tests on the Flight Model Multiplexer at ambient temperature. Included in the set of data is the following:

Power Supply Test Data	Section 1
Miscellaneous Data	Section 2
Input Buffer Test Data	Section 3
Gain and Offset Errors	
A/D Reference Voltages	
External DC Restore Test	
AC Response Test	
Droop Test	
DCR Time Constant	
A/D Threshold Test Data.	Section 4
Cross-talk Test Data	Section 5
Thermistor Test Data	Section 6
Bilevel Commands Signal Parameters Data. .	Section 7
A/D Threshold Test Data - Ambient, Voltage Margin Low Bus	Section 8
Miscellaneous Data.	Section 9
A/D Threshold Test Data - Ambient, Voltage Margin Low Bus	Section 10
Cross-talk Test Data - per FR 4268 . . .	Section 11
Serial Data and Bit Clock Parameters. . .	Section 12
Wire Check Data Sheets	Section 13

Other acceptance data taken at +50°C, -15°C, before and after vibration, and prior to rework of the Multiplexer is retained in SBRC's Product Assurance data files, available for review upon request.

Appendix A

Multiplexer Performance Data

A/D THRESHOLD TEST DATA
Band 5

Section 4E

REVIEWED PAGES
1, 2, 3, 4.



115-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 1 12/11/81
1981/12/01 07:45:28 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
3.5.4.5-8 AND THRESHOLD TEST (BAND= 5, SENSOR=1) 0010
S U M M A R Y

CHECK 1) RMS ERROR, 2) THRESHOLD INCREMENT (1/- 0.0 <= THRESH INC <= 31.2)
THE REMAINING DATA ARE FOR INFORMATION ONLY

BEST FIT STRAIGHT LINE IS: $Y = -15.883X - 41.7MV$

DEVIATION OF SLOPE FROM IDEAL IS: 1.653%
OFFSET IS: -41.7MV
COEFFICIENT OF DETERMINATION IS: $R^2 = .99999180$
ANALOG INPUT DURING DC RESTORE IS: 63.8MV

RMS ERROR = 3.656MV REQMT: RMS ERROR <= 7.812MV

THRESHOLD INCREMENT MEASUREMENT

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
26.0MV	195	15.935MV	3.9MV	241	4.295MV

LOWER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
1.8MV	96	-0.148MV	-4.3MV	235	1.496MV

UPPER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
1.9MV	231	0.041MV	-2.0MV	150	1.419MV

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TEST PASSED



HS-236 THEMATIC MAPPER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 2

1981/12/01 07:45:42 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

4.1.1.1.1-4 AND THRESHOLD TEST (BAND= 5, SENSOR=1) 01/81

THRESHOLD AND OUTPUT NUMBER THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV) LEVELS RATIO 1:1			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
		NOMINAL	LOWER	UPPER		POINT	DEVIATION

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

1	1111 1111	-24.375	-32.6	1.2	0.1	-25.8	-6.8
2	1111 1110	-8.750	-14.1	1.3	1.4	-9.9	-4.2
3	1111 1101	6.875	4.2	-0.1	1.5	5.9	-1.7
4	1111 1100	22.500	19.3	-1.5	-1.5	21.8	-2.5
5	1111 1011	38.125	35.5	-1.6	-1.5	37.7	-2.2
6	1111 1010	53.750	53.1	1.4	0.0	53.6	-0.5
7	1111 1001	69.375	70.7	1.5	1.5	69.5	1.2
8	1111 1000	85.000	83.4	-1.5	0.0	85.4	-1.9
9	1111 0111	100.625	97.4	-1.7	-1.6	101.2	-3.8
10	1111 0110	116.250	117.6	-0.1	-1.2	117.1	0.5
11	1111 0101	131.875	132.5	1.5	1.6	133.0	-0.5
12	1111 0100	147.500	151.3	1.4	1.5	148.9	2.4
13	1111 0011	163.125	163.5	-1.4	-0.1	164.8	-1.3
14	1111 0010	178.750	186.3	-1.4	-1.4	180.7	5.7
15	1111 0001	194.375	198.6	1.5	0.0	196.5	2.1
16	1111 0000	210.000	212.3	1.4	1.3	212.4	-0.2
17	1110 1111	225.625	223.6	-0.1	1.4	228.3	-4.7
18	1110 1110	241.250	243.6	-1.4	-1.4	244.2	-0.5
19	1110 1101	256.875	261.7	-1.5	-1.2	260.1	1.6
20	1110 1100	272.500	276.6	1.4	0.0	275.9	0.6
21	1110 1011	288.125	289.8	1.7	1.8	291.8	-2.0
22	1110 1010	303.750	311.5	-1.5	0.0	307.7	3.7
23	1110 1001	319.375	328.3	-1.6	-1.5	323.6	4.7
24	1110 1000	335.000	342.3	-0.0	-1.4	339.5	2.9
25	1110 0111	350.625	351.7	1.7	1.6	355.4	-3.7

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FL1. S/N 3 PAGE 3

1981/12/01 07145:42 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.5-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=1)



00101

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
26	1110 0110	366.250	372.2	1.5	1.5	20.6	371.2	1.0
27	1110 0101	381.875	389.7	-1.4	0.1	17.4	387.1	2.5
28	1110 0100	397.500	410.0	-1.5	-1.5	20.3	403.0	7.0
29	1110 0011	413.125	417.8	1.5	0.0	7.8	418.9	-1.1
30	1110 0010	428.750	440.8	1.3	1.5	23.0	434.8	6.0
31	1110 0001	444.375	454.4	-0.0	1.6	13.6	450.7	3.8
32	1110 0000	460.000	464.5	-1.4	-1.4	10.1	466.5	-2.0
33	1101 1111	475.625	479.6	-1.4	-1.4	15.1	482.4	-2.9
34	1101 1110	491.250	495.8	1.4	0.0	16.2	498.3	-2.5
35	1101 1101	506.875	514.6	1.4	1.3	18.8	514.2	0.4
36	1101 1100	522.500	529.4	-1.5	0.0	14.8	530.1	-0.7
37	1101 1011	538.125	545.6	-1.5	-1.5	16.2	546.0	-0.3
38	1101 1010	553.750	560.9	-0.0	-1.4	18.2	561.8	2.0
39	1101 1001	569.375	580.8	1.5	1.5	16.9	577.7	3.0
40	1101 1000	585.000	594.5	1.5	1.4	13.8	593.6	0.9
41	1101 0111	600.625	607.1	-1.5	0.1	12.6	609.5	-2.4
42	1101 0110	616.250	626.9	-1.5	-1.4	19.7	625.4	1.5
43	1101 0101	631.875	642.1	1.4	0.0	15.2	641.3	0.9
44	1101 0100	647.500	660.7	1.2	1.1	18.6	657.1	3.6
45	1101 0011	663.125	671.5	-0.0	1.4	10.8	673.0	-1.5
46	1101 0010	678.750	695.1	-1.6	-1.5	23.6	688.9	6.2
47	1101 0001	694.375	709.3	-1.4	-1.5	14.1	704.8	4.5
48	1101 0000	710.000	724.7	1.4	0.1	15.4	720.7	4.0
49	1100 1111	725.625	732.7	1.5	1.6	8.1	736.6	-3.8
50	1100 1110	741.250	751.9	-1.4	0.0	19.2	752.4	-0.5
51	1100 1101	756.875	770.5	-1.5	-1.8	18.6	768.3	2.2

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 4
 1981/12/01 07:45:42 PENALTY TEST FULL PREFORMANCE @ AMBIENT TEMP.

3.5.3.5-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=1)

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S27

0011

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV) LEVELS RATIO= 1 : 1			INCREASE FROM PREV THRESHOLD	BEST FIT STRATGHT LINE	
			NOMTNAL	LOWER	UPPER		POINT	DEVIATION
52	1100 1100	772.500	786.2	-0.1	-1.4	15.7	784.2	2.0
53	1100 1011	788.125	798.3	1.5	1.6	12.1	800.1	-1.8
54	1100 1010	803.750	817.4	1.5	1.5	19.0	816.0	1.4
55	1100 1001	819.375	836.1	-1.4	0.2	18.7	831.9	4.2
56	1100 1000	835.000	853.5	-1.5	-1.4	17.4	847.7	5.8
57	1100 0111	850.625	859.6	1.5	-0.2	6.0	863.6	-4.1
58	1100 0110	866.250	879.4	1.5	1.4	19.8	879.5	-0.2
59	1100 0101	881.875	895.6	0.1	1.7	16.2	895.4	0.2
60	1100 0100	897.500	917.9	-1.1	-1.2	22.4	911.3	6.6
61	1100 0011	913.125	926.5	-1.5	-1.7	8.5	927.2	-0.7
62	1100 0010	928.750	947.2	1.5	0.1	20.8	943.0	4.2
63	1100 0001	944.375	961.1	1.4	1.6	13.8	958.9	2.1
64	1100 0000	960.000	979.5	-1.5	0.0	18.5	974.8	4.7
65	1011 1111	975.625	990.2	-1.4	-1.5	10.7	990.7	-0.5
66	1011 1110	991.250	1007.0	0.0	-1.4	16.8	1006.6	0.4
67	1011 1101	1006.88	1025.1	1.4	1.4	18.0	1022.5	2.6
68	1011 1100	1022.50	1039.4	1.5	1.5	14.3	1038.3	1.0
69	1011 1011	1038.13	1055.7	-1.5	0.0	16.4	1054.2	1.5
70	1011 1010	1053.75	1073.4	-0.9	-1.3	17.6	1070.1	3.3
71	1011 1001	1069.38	1090.2	1.5	0.0	16.8	1086.0	4.2
72	1011 1000	1085.00	1100.6	1.4	1.4	10.3	1101.9	-1.3
73	1011 0111	1100.63	1115.3	-0.2	1.2	14.7	1117.8	-2.5
74	1011 0110	1116.25	1136.0	-1.5	-1.5	20.7	1133.6	2.3
75	1011 0101	1131.88	1152.8	-1.5	-1.6	16.9	1149.5	3.3
76	1011 0100	1147.50	1169.2	1.6	0.1	16.3	1165.4	3.8
77	1011 0011	1163.13	1180.5	1.6	1.6	11.3	1181.3	-0.8
78	1011 0010	1178.75	1203.4	-1.5	0.0	23.0	1197.2	6.3

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 5

1981/12/01 07:45:42 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

0.5.4.5-B A/D THRESHOLD TEST (BAND= 5, SENSOR=1)

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0013

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
79	1011 0001	1194.38	1218.1	-1.5	-1.4	14.6	1213.1	5.0
80	1011 0000	1210.00	1234.4	0.0	-1.5	16.4	1228.9	5.5
81	1010 1111	1225.63	1241.3	1.7	1.7	6.9	1244.8	-3.5
82	1010 1110	1241.25	1258.0	1.5	1.5	17.5	1260.7	-1.9
83	1010 1101	1256.88	1279.1	-1.6	-0.1	20.3	1276.6	2.5
84	1010 1100	1272.50	1293.6	-1.5	-1.4	14.5	1292.5	1.1
85	1010 1011	1288.13	1306.8	1.5	-0.0	13.1	1308.4	-1.6
86	1010 1010	1303.75	1325.3	1.4	1.5	18.5	1324.2	1.0
87	1010 1001	1319.38	1342.7	0.0	1.7	17.4	1340.1	2.6
88	1010 1000	1335.00	1358.0	-1.5	-1.5	15.3	1356.0	2.0
89	1010 0111	1350.63	1369.3	-1.6	-1.7	11.3	1371.9	-2.6
90	1010 0110	1366.25	1387.1	1.3	-0.2	17.8	1387.8	-0.7
91	1010 0101	1381.88	1403.6	1.7	1.7	16.5	1403.7	-0.1
92	1010 0100	1397.50	1423.4	-0.3	0.0	19.8	1419.5	3.8
93	1010 0011	1413.13	1434.4	-1.6	-1.6	11.0	1435.4	-1.0
94	1010 0010	1428.75	1456.2	0.0	-1.5	21.8	1451.3	4.9
95	1010 0001	1444.38	1468.9	1.7	1.6	12.6	1467.2	1.7
96	1010 0000	1460.00	1483.2	1.8	1.5	14.3	1483.1	0.1
97	1001 1111	1475.63	1494.1	-1.3	0.3	10.9	1499.0	-4.8
98	1001 1110	1491.25	1510.3	-1.5	-1.4	16.2	1514.8	-4.6
99	1001 1101	1506.88	1528.6	1.6	0.0	18.3	1530.7	-2.1
100	1001 1100	1522.50	1542.7	-0.6	1.5	14.0	1546.6	-4.0
101	1001 1011	1538.13	1558.0	-0.0	1.8	15.3	1562.5	-4.5
102	1001 1010	1553.75	1576.0	-1.6	-1.4	18.8	1578.4	-1.6
103	1001 1001	1569.38	1595.7	-1.6	-1.6	18.9	1594.3	1.5
104	1001 1000	1585.00	1606.8	1.5	-0.0	11.1	1610.1	-3.3

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 6
 1981/12/01 07:45:42 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 3.5.0.5-B A/D THRESHOLD TEST (BAND= 5, SENSOR=1)

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
105	1001 0111	1600.63	1619.0	1.6	1.7	12.2	1626.0	-7.1
106	1001 0110	1616.25	1639.2	-1.5	0.1	20.2	1641.9	-2.7
107	1001 0101	1631.88	1656.7	0.4	-1.6	17.5	1657.8	-1.1
108	1001 0100	1647.50	1672.4	0.1	0.3	15.7	1673.7	-1.3
109	1001 0011	1663.13	1684.2	1.6	1.6	11.8	1689.6	-5.4
110	1001 0010	1678.75	1704.9	1.5	1.6	20.7	1705.4	-0.6
111	1001 0001	1694.38	1721.9	-1.7	0.0	17.0	1721.3	0.5
112	1001 0000	1710.00	1741.2	-1.5	-1.6	19.3	1737.2	4.0
113	1000 1111	1725.63	1745.2	1.6	0.0	4.0	1753.1	-7.9
114	1000 1110	1741.25	1761.9	1.6	1.6	16.7	1769.0	-7.1
115	1000 1101	1756.88	1780.8	-0.0	1.6	18.9	1784.9	-4.0
116	1000 1100	1772.50	1796.9	-1.6	-1.6	16.1	1800.7	-3.8
117	1000 1011	1788.13	1811.9	-1.6	-1.6	15.0	1816.6	-4.7
118	1000 1010	1803.75	1828.1	1.5	0.0	16.2	1832.5	-4.4
119	1000 1001	1819.38	1846.2	1.8	1.8	18.1	1848.4	-2.2
120	1000 1000	1835.00	1865.0	-1.5	-0.0	18.8	1864.3	0.8
121	1000 0111	1850.63	1872.9	-1.7	-1.7	7.8	1880.2	-7.3
122	1000 0110	1866.25	1891.4	-0.0	-1.3	18.5	1896.0	-4.6
123	1000 0101	1881.88	1909.5	-0.8	-0.6	18.0	1911.9	-2.5
124	1000 0100	1897.50	1926.6	1.7	1.7	17.1	1927.8	-1.2
125	1000 0011	1913.13	1937.8	-1.5	-0.1	11.2	1943.7	-5.9
126	1000 0010	1928.75	1958.9	-1.4	-1.5	21.1	1959.6	-0.7
127	1000 0001	1944.38	1972.3	1.6	-0.0	13.4	1975.5	-3.1
128	1000 0000	1960.00	1996.3	1.4	1.4	24.0	1991.3	4.9
129	0111 1111	1975.63	2004.1	0.0	1.7	7.8	2007.2	-3.2
130	0111 1110	1991.25	2023.7	-1.4	-1.5	19.6	2023.1	0.6

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL .. FLT. S/N 3 PAGE 7

1981/12/01 07:45:42 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.5-B A/D THRESHOLD TEST (BAND= 5, SENSOR=1)

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
131	0111 1101	2006.88	2044.5	-1.6	-1.6	20.8	2039.0	5.5
132	0111 1100	2022.50	2057.6	1.5	-0.0	13.1	2054.9	2.7
133	0111 1011	2038.13	2069.4	1.5	1.6	11.8	2070.8	-1.3
134	0111 1010	2053.75	2089.1	0.1	1.6	19.7	2086.6	2.5
135	0111 1001	2069.38	2107.1	-1.7	-1.6	17.9	2102.5	4.6
136	0111 1000	2085.00	2117.5	0.0	-1.5	10.4	2118.4	-0.9
137	0111 0111	2100.63	2130.5	1.6	1.6	12.9	2134.3	-3.8
138	0111 0110	2116.25	2150.6	1.6	1.6	20.1	2150.2	0.4
139	0111 0101	2131.88	2172.0	-1.6	0.0	21.4	2166.1	6.0
140	0111 0100	2147.50	2189.5	-1.5	-1.6	17.4	2181.9	7.5
141	0111 0011	2163.13	2197.3	0.0	-1.6	7.8	2197.8	-0.5
142	0111 0010	2178.75	2218.5	1.6	1.6	21.1	2213.7	4.8
143	0111 0001	2194.38	2231.8	0.0	1.7	13.3	2229.6	2.2
144	0111 0000	2210.00	2248.7	-1.5	-1.5	16.9	2245.5	3.2
145	0110 1111	2225.63	2258.3	-1.6	-1.6	9.5	2261.4	-3.1
146	0110 1110	2241.25	2275.5	1.6	0.0	17.2	2277.2	-1.7
147	0110 1101	2256.88	2292.5	1.6	1.6	17.0	2293.1	-0.6
148	0110 1100	2272.50	2312.1	-2.7	-1.1	19.6	2309.0	3.1
149	0110 1011	2288.13	2323.7	-1.8	-1.7	11.5	2324.9	-1.2
150	0110 1010	2303.75	2344.1	-0.5	-2.0	20.4	2340.8	3.4
151	0110 1001	2319.38	2358.1	1.7	1.7	14.0	2356.7	1.5
152	0110 1000	2335.00	2372.0	1.6	1.6	13.9	2372.5	-0.5
153	0110 0111	2350.63	2384.3	-1.5	0.1	12.3	2388.4	-4.1
154	0110 0110	2366.25	2404.9	-1.6	-1.5	20.6	2404.3	0.6
155	0110 0101	2381.88	2424.6	-4.1	-1.6	19.7	2420.2	4.4
156	0110 0100	2397.50	2440.4	-0.5	1.7	15.8	2436.1	4.3
157	0110 0011	2413.13	2448.0	0.1	1.7	7.6	2452.0	-3.9

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HS-206 HYDRA-MATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 8
 1981/12/01 07:45:42 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 B.S.D.S-H A/D THRESHOLD TEST (BAND= 5, SENSOR=1)

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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV) LEVELS RATIO= 1 11 NOMINAL LOWER UPPER	INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE POINT DEVIATION
158	0110 0010	2428.75	2472.8 0.9 0.9	24.8	2467.8 5.0
159	0110 0001	2444.38	2486.0 -1.8 -1.8	13.1	2483.7 2.3
160	0110 0000	2460.00	2497.7 1.6 0.0	11.7	2499.6 -2.0
161	0101 1111	2475.63	2508.2 1.7 1.7	10.5	2515.5 -7.3
162	0101 1110	2491.25	2525.6 0.0 1.7	17.4	2531.4 -5.8
163	0101 1101	2506.88	2545.2 -1.6 -1.6	19.6	2547.3 -2.1
164	0101 1100	2522.50	2563.8 -0.0 -1.6	18.6	2563.1 0.6
165	0101 1011	2538.13	2573.4 1.7 1.7	9.6	2579.0 -5.7
166	0101 1010	2553.75	2592.5 1.6 1.6	19.1	2594.9 -2.4
167	0101 1001	2569.38	2611.3 -1.7 0.0	18.8	2610.8 0.5
168	0101 1000	2585.00	2624.4 -1.6 -1.6	13.1	2626.7 -2.3
169	0101 0111	2600.63	2636.3 0.0 -1.7	11.9	2642.6 -6.3
170	0101 0110	2616.25	2654.2 1.6 1.6	17.9	2658.4 -4.3
171	0101 0101	2631.88	2674.1 -3.6 1.7	19.9	2674.3 -0.3
172	0101 0100	2647.50	2693.3 -1.7 -1.6	19.5	2690.2 3.4
173	0101 0011	2663.13	2701.4 -1.7 -1.6	7.8	2706.1 -4.7
174	0101 0010	2678.75	2721.8 1.6 -0.1	20.4	2722.0 -0.2
175	0101 0001	2694.38	2735.9 1.7 1.6	14.1	2737.9 -2.0
176	0101 0000	2710.00	2755.0 0.0 1.6	19.1	2753.7 1.3
177	0100 1111	2725.63	2762.7 -1.7 -1.7	7.7	2769.6 -6.9
178	0100 1110	2741.25	2780.7 0.0 -1.6	18.0	2785.5 -4.8
179	0100 1101	2756.88	2796.1 1.6 1.7	15.5	2801.4 -5.2
180	0100 1100	2772.50	2816.4 -1.5 -1.6	20.3	2817.5 -0.8
181	0100 1011	2788.13	2828.0 -1.8 -0.1	11.6	2833.1 -5.1
182	0100 1010	2803.75	2847.7 -1.7 -1.6	19.7	2849.0 -1.3
183	0100 1001	2819.38	2863.9 0.1 -1.6	16.2	2864.9 -1.0

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 9

1981/12/01 07:45:42 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

34545-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=1)



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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LEVELS RATIO= LOWER	UPPER		POINT	DEVIATION
184	0100 1000	2835.00	2880.4	1.6	1.6	16.4	2880.8	-0.4
185	0100 0111	2850.63	2887.3	0.0	1.8	7.0	2896.7	-9.3
186	0100 0110	2866.25	2908.8	-1.7	-1.6	21.4	2912.6	-3.8
187	0100 0101	2881.88	2928.7	-1.8	-1.7	19.9	2928.4	0.2
188	0100 0100	2897.50	2945.5	1.7	0.0	16.8	2944.3	1.1
189	0100 0011	2913.13	2952.6	1.8	1.8	7.1	2960.2	-7.6
190	0100 0010	2928.75	2975.1	-0.1	1.6	22.5	2976.1	-1.0
191	0100 0001	2944.38	2990.6	-1.8	-1.7	15.4	2992.0	-1.4
192	0100 0000	2960.00	3012.5	-0.1	-1.2	21.9	3007.9	4.6
193	0011 1111	2975.63	3016.9	1.6	1.8	4.4	3023.7	-6.9
194	0011 1110	2991.25	3033.7	1.6	1.7	16.9	3039.6	-5.9
195	0011 1101	3006.88	3059.8	-1.7	0.0	26.0	3055.5	4.3
196	0011 1100	3022.50	3071.4	-1.6	-1.6	11.6	3071.4	0.0
197	0011 1011	3038.13	3084.4	-0.0	-1.8	12.9	3087.3	-2.9
198	0011 1010	3053.75	3101.2	1.6	1.7	16.8	3103.2	-2.0
199	0011 1001	3069.38	3118.9	0.0	1.8	17.8	3119.0	-0.1
200	0011 1000	3085.00	3130.5	-1.8	-1.7	11.5	3134.9	-4.5
201	0011 0111	3100.63	3145.8	-1.8	-1.7	15.3	3156.8	-5.0
202	0011 0110	3116.25	3164.6	1.6	0.0	18.7	3166.7	-2.1
203	0011 0101	3131.88	3184.0	-2.3	1.6	19.5	3182.6	1.4
204	0011 0100	3147.50	3201.4	-0.0	1.7	17.3	3198.5	2.7
205	0011 0011	3163.13	3211.5	-1.8	-1.8	10.2	3214.3	-2.8
206	0011 0010	3178.75	3233.3	-0.1	-1.7	21.8	3230.2	3.1
207	0011 0001	3194.38	3246.1	1.7	1.8	12.8	3246.1	0.0
208	0011 0000	3210.00	3263.9	1.6	1.8	17.8	3262.0	1.9
209	0010 1111	3225.63	3277.3	-1.7	-0.2	9.4	3277.9	-4.6

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 10

1981/12/01 07:45:42 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1113-5-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=1)

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV) LEVELS RATIO= 1 : 1 NOMINAL LOWER UPPER	INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE POINT DEVIATION
210	0010 1110	3241.25	3290.7 -1.7 -1.6	17.5	3293.8 -3.0
211	0010 1101	3256.88	3308.6 -0.0 -1.7	17.8	3309.6 -1.1
212	0010 1100	3272.50	3328.3 -3.3 1.8	19.7	3325.5 2.7
213	0010 1011	3288.13	3337.1 0.1 1.8	8.9	3341.4 -4.3
214	0010 1010	3303.75	3358.7 -1.8 -1.7	21.5	3357.3 1.4
215	0010 1001	3319.38	3375.5 -1.8 -1.6	16.8	3373.2 2.3
216	0010 1000	3335.00	3388.0 1.7 0.0	12.5	3389.1 -1.0
217	0010 0111	3350.63	3399.1 1.7 1.8	11.0	3404.9 -5.9
218	0010 0110	3366.25	3419.6 -0.6 1.4	20.5	3420.8 -1.2
219	0010 0101	3381.88	3440.9 -1.8 -1.8	21.3	3436.7 4.2
220	0010 0100	3397.50	3457.5 -2.6 1.5	16.6	3452.6 5.0
221	0010 0011	3413.13	3464.9 1.7 1.8	7.4	3468.5 -3.6
222	0010 0010	3428.75	3486.9 1.7 1.8	21.9	3484.4 2.5
223	0010 0001	3444.38	3503.4 -1.9 -0.1	16.5	3500.2 3.1
224	0010 0000	3460.00	3519.7 -1.7 -1.7	16.3	3516.1 3.6
225	0001 1111	3475.63	3527.8 -0.1 -1.7	8.1	3532.0 -4.2
226	0001 1110	3491.25	3542.2 1.7 1.8	14.4	3547.9 -5.7
227	0001 1101	3506.88	3561.3 -0.1 1.8	19.1	3563.8 -2.5
228	0001 1100	3522.50	3581.4 -1.8 -1.6	20.1	3579.7 1.8
229	0001 1011	3538.13	3594.1 -1.9 -1.8	12.6	3595.5 -1.5
230	0001 1010	3552.75	3610.1 1.7 -0.0	16.0	3611.4 -1.3
231	0001 1001	3569.38	3628.8 1.6 1.9	18.7	3627.3 1.5
232	0001 1000	3585.00	3640.9 -0.0 1.7	12.1	3643.2 -2.3
233	0001 0111	3600.63	3656.1 -1.9 -1.8	15.2	3659.1 -3.0
234	0001 0110	3616.25	3675.7 -0.0 -1.7	19.6	3675.0 0.7
235	0001 0101	3631.88	3696.0 -4.3 1.8	20.3	3690.8 5.1
236	0001 0100	3647.50	3711.6 1.7 1.9	15.6	3706.7 4.9

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HS-236 THERMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 11

1981/12/01 07:45:42 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.5-4 A/D THRESHOLD TEST (BAND= 5, SENSOR=1)

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THRESHOLD NUMBER	A/D THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
237	0001 0011	3663.13	3722.3	-1.8	0.0	10.6	3722.6	-0.3
238	0001 0010	3678.75	3743.2	-1.8	-1.6	20.9	3738.5	4.7
239	0001 0001	3694.30	3759.0	-0.1	-1.8	15.8	3754.4	4.6
240	0001 0000	3710.00	3779.0	1.7	1.8	20.0	3770.3	8.7
241	0000 1111	3725.63	3782.9	0.0	1.9	3.9	3786.1	-3.3
242	0000 1110	3741.25	3801.7	-1.9	-1.7	18.8	3802.0	-0.3
243	0000 1101	3756.88	3819.0	-1.9	-1.7	18.1	3817.9	1.9
244	0000 1100	3772.50	3840.3	-4.0	0.1	20.5	3833.8	6.5
245	0000 1011	3788.13	3857.3	1.6	1.8	8.9	3849.7	-0.4
246	0000 1010	3803.75	3868.2	-0.1	1.8	10.9	3865.6	2.7
247	0000 1001	3819.38	3887.7	-1.9	-1.8	19.5	3881.4	6.3
248	0000 1000	3835.00	3905.0	-0.1	-1.7	17.2	3897.3	7.6
249	0000 0111	3850.63	3911.6	1.8	1.8	6.6	3913.2	-1.6
250	0000 0110	3866.25	3931.5	1.5	1.8	20.0	3929.1	2.5
251	0000 0101	3881.88	3949.1	-1.9	0.0	17.6	3945.0	4.2
252	0000 0100	3897.50	3971.6	-0.1	0.1	22.5	3960.9	10.8
253	0000 0011	3913.13	3979.0	-0.1	-1.8	8.2	3976.7	3.0
254	0000 0010	3928.75	3999.0	1.7	1.8	19.2	3992.6	6.4
255	0000 0001	3944.38	4014.8	-0.1	1.9	15.8	4008.5	6.3

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HS-236 THEMATIC MAPPER MIX UNIT TEST MODEL., FLT. S/N 3 PAGE 12
1981/12/01 07:52:07 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
3.5.4.5-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=2) 0017
S U M M A R Y

CHECK 1) RMS ERROR, 2) THRESHOLD INCREMENT(+/- 0.0 = THRH INC <= 31.2)
THE REMAINING DATA ARE FOR INFORMATION ONLY

BEST FIT STRAIGHT LINE IS: $Y = 15.909X - 41.3MV$

DEVIATION OF SLOPE FROM IDEAL IS: 1.819%
OFFSET IS: -41.3MV
COEFFICIENT OF DETERMINATION IS: $R^2 = .99998860$
ANALOG INPUT DURING DC RESTORE IS: 63.8MV

RMS ERROR = 3.717MV REQMT: RMS ERROR <= 7.812MV

THRESHOLD INCREMENT MEASUREMENT

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
26.4MV	211	15.960MV	5.0MV	200	4.430MV

LOWER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
2.3MV	63	-0.298MV	-5.8MV	204	1.272MV

UPPER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
7.0MV	243	0.090MV	-1.2MV	234	1.029MV

TEST PASSED

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 13
1981/12/01 07:52:20 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
3.5.3.5-B A/D THRESHOLD TEST (BAND= 5, SENSOR=2)

THRESHOLD A/D OUTPUT NUMBER THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
		NOMINAL	LOWER	UPPER		POINT	DEVIATION

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

1	1111 1111	-24.375	-29.8	-2.1	-0.6		-25.4	-4.4
2	1111 1110	-8.750	-13.3	-0.9	-0.7	16.5	-9.5	-3.8
3	1111 1101	6.875	6.2	0.8	0.0	19.5	6.4	-0.2
4	1111 1100	22.500	20.5	0.7	0.8	14.3	22.3	-1.9
5	1111 1011	38.125	36.9	-0.8	0.0	16.4	38.2	-1.4
6	1111 1010	53.750	55.5	-0.8	-0.9	18.7	54.1	1.4
7	1111 1001	69.375	75.4	-0.1	-0.7	19.8	70.1	5.3
8	1111 1000	85.000	82.6	0.8	0.8	7.2	86.0	-3.3
9	1111 0111	100.625	97.9	0.8	0.8	15.2	101.9	-4.0
10	1111 0110	116.250	117.1	-1.0	-0.0	19.2	117.8	-0.6
11	1111 0101	131.875	136.4	-0.8	-0.8	19.3	133.7	2.7
12	1111 0100	147.500	152.5	0.7	0.0	16.1	149.6	2.9
13	1111 0011	163.125	164.3	0.7	0.7	11.7	165.5	-1.3
14	1111 0010	178.750	185.0	-0.1	0.8	20.7	181.4	3.6
15	1111 0001	194.375	201.7	-0.9	-0.8	16.7	197.3	4.4
16	1111 0000	210.000	210.8	-0.7	-0.7	9.1	213.2	-2.4
17	1110 1111	225.625	225.7	0.8	0.0	14.9	229.1	-3.4
18	1110 1110	241.250	242.1	0.9	0.9	16.3	245.1	-3.0
19	1110 1101	256.875	263.0	-0.8	0.1	20.9	261.0	2.0
20	1110 1100	272.500	278.5	-0.8	-0.7	15.5	276.9	1.6
21	1110 1011	288.125	292.9	-0.0	-0.8	14.4	292.8	0.1
22	1110 1010	303.750	310.8	0.7	0.8	17.9	308.7	2.1
23	1110 1001	319.375	330.3	1.0	0.9	19.5	324.6	5.7
24	1110 1000	335.000	342.6	-0.7	0.0	12.3	340.5	2.1
25	1110 0111	350.625	354.6	-0.9	-0.8	12.0	356.4	-1.8

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US-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 14
1981/12/01 07:52:20 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
1.5.3.5-8 A/D THRESHOLD TEST (CRAND)= 5, SENSOR=2

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
26	1110 0110	366.250	372.2	0.9	0.0	17.6	372.3	-0.1
27	1110 0101	381.875	391.7	0.6	0.9	19.4	388.2	3.4
28	1110 0100	397.500	409.6	-0.1	0.7	18.0	404.1	5.5
29	1110 0011	413.125	420.7	-0.8	-0.8	11.1	420.1	0.7
30	1110 0010	428.750	441.7	-0.8	-0.8	21.0	436.0	5.7
31	1110 0001	444.375	456.6	0.7	0.0	14.8	451.9	4.7
32	1110 0000	460.000	463.1	0.8	0.8	6.6	467.8	-4.7
33	1101 1111	475.625	481.1	-0.8	-0.0	18.0	483.7	-2.6
34	1101 1110	491.250	496.6	-0.8	-0.7	15.5	499.6	-3.0
35	1101 1101	506.875	517.2	-0.0	-0.8	20.6	515.5	1.7
36	1101 1100	522.500	529.3	0.7	0.8	12.1	531.4	-2.2
37	1101 1011	538.125	546.5	0.7	0.8	17.2	547.3	-0.9
38	1101 1010	553.750	565.1	-0.8	0.0	18.7	563.2	1.9
39	1101 1001	569.375	585.0	-0.7	-0.8	19.8	579.1	5.8
40	1101 1000	585.000	594.8	0.8	0.0	9.8	595.1	-0.3
41	1101 0111	600.625	608.0	0.7	0.7	13.3	611.0	-2.9
42	1101 0110	616.250	625.5	0.0	0.9	17.5	626.9	-1.3
43	1101 0101	631.875	645.5	-0.9	0.1	19.9	642.8	2.7
44	1101 0100	647.500	663.2	-0.8	-0.7	17.7	658.7	4.5
45	1101 0011	663.125	673.9	0.7	0.8	10.7	674.6	-0.7
46	1101 0010	678.750	693.9	0.8	0.8	20.0	690.5	3.4
47	1101 0001	694.375	711.2	-0.8	2.3	17.2	706.4	4.8
48	1101 0000	710.000	725.7	-0.6	-0.6	14.5	722.3	3.4
49	1100 1111	725.625	735.9	0.0	-0.6	10.1	738.2	-2.3
50	1100 1110	741.250	750.7	0.8	0.8	14.8	754.1	-3.5
51	1100 1101	756.875	772.5	0.3	0.8	21.8	770.1	2.5

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 15
1981/12/01 07:52:20 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
3.5.3.5-B A/D THRESHOLD TEST (BAND= 5, SENSOR=2)

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV) LEVELS RATIO= 1 : 1 NOMINAL LOWER UPPER	INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE POINT DEVIATION
52	1100 1100	772.500	787.2 -0.9 -0.8	14.6	786.0 1.2
53	1100 1011	788.125	801.7 -0.8 -0.8	14.5	801.9 -0.2
54	1100 1010	803.750	818.8 1.1 0.1	17.1	817.8 1.0
55	1100 1001	819.375	838.1 0.8 1.0	19.3	833.7 4.4
56	1100 1000	835.000	853.7 -0.0 0.7	15.6	849.6 4.1
57	1100 0111	850.625	862.8 -0.8 -0.8	9.1	865.5 -2.7
58	1100 0110	866.250	880.6 -1.0 -0.9	17.8	881.4 -0.8
59	1100 0101	881.875	899.4 0.4 0.8	18.7	897.3 2.0
60	1100 0100	897.500	916.9 0.7 0.8	17.5	913.2 3.7
61	1100 0011	913.125	928.4 -0.8 0.1	11.5	929.2 -0.8
62	1100 0010	928.750	948.6 -0.9 -0.9	20.2	945.1 3.5
63	1100 0001	944.375	964.6 2.3 -0.8	16.0	961.0 3.6
64	1100 0000	960.000	978.3 0.7 0.8	13.8	976.9 1.5
65	1011 1111	975.625	991.5 0.8 0.7	13.1	992.8 -1.3
66	1011 1110	991.250	1007.2 -0.7 -0.8	15.7	1008.7 -1.5
67	1011 1101	1006.88	1029.7 -0.7 -0.7	22.4	1024.6 5.1
68	1011 1100	1022.50	1041.1 0.7 -0.0	11.4	1040.5 0.6
69	1011 1011	1038.13	1057.1 0.8 0.8	16.0	1056.4 0.7
70	1011 1010	1053.75	1074.1 0.0 0.8	17.0	1072.3 1.8
71	1011 1001	1069.38	1096.1 -0.8 -0.8	22.0	1088.2 7.9
72	1011 1000	1085.00	1102.8 -0.9 -0.8	6.6	1104.2 -1.4
73	1011 0111	1100.63	1118.2 0.7 0.7	15.4	1120.1 -1.9
74	1011 0110	1116.25	1135.3 0.7 0.8	17.0	1136.0 -0.7
75	1011 0101	1131.88	1156.3 -0.8 -0.0	21.1	1151.9 4.5
76	1011 0100	1147.50	1172.3 -0.8 -0.7	16.0	1167.8 4.5
77	1011 0011	1163.13	1184.4 0.0 -0.9	12.1	1183.7 0.7
78	1011 0010	1178.75	1203.0 0.7 0.8	18.6	1199.6 3.4

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3.5.4.5-B A/D THRESHOLD TEST (BAND= 5, SENSOR=2)

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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
79	1011 0001	1194.38	1227.5	0.8	0.8	19.4	1215.5	7.0
80	1011 0000	1210.00	1231.4	-0.7	-0.6	8.9	1231.4	-0.0
81	1010 1111	1225.63	1245.4	-0.8	-0.7	14.0	1247.3	-1.9
82	1010 1110	1241.25	1259.7	0.6	0.0	14.3	1263.2	-3.5
83	1010 1101	1256.88	1281.9	0.9	0.9	22.2	1279.2	2.8
84	1010 1100	1272.50	1294.3	0.0	0.8	12.4	1295.1	-0.7
85	1010 1011	1288.13	1310.8	-0.8	-0.8	16.5	1311.0	-0.1
86	1010 1010	1303.75	1328.6	-0.8	-0.8	17.7	1326.9	1.7
87	1010 1001	1319.38	1348.2	0.9	0.9	19.6	1342.8	5.4
88	1010 1000	1335.00	1358.7	0.8	0.9	10.5	1358.7	0.0
89	1010 0111	1350.63	1371.9	-0.9	-0.0	13.1	1374.6	-2.7
90	1010 0110	1366.25	1388.9	-0.7	-0.8	17.0	1390.5	-1.6
91	1010 0101	1381.88	1409.1	0.0	-0.8	20.2	1406.4	2.7
92	1010 0100	1397.50	1426.6	-2.0	0.8	17.4	1422.3	4.3
93	1010 0011	1413.13	1436.4	0.8	0.8	9.8	1438.2	-1.8
94	1010 0010	1428.75	1456.8	-0.8	-0.9	20.4	1454.2	2.7
95	1010 0001	1444.38	1476.0	-0.8	-0.9	19.2	1470.1	5.9
96	1010 0000	1460.00	1483.8	0.8	-0.0	7.8	1486.0	-2.2
97	1001 1111	1475.63	1498.1	-1.1	0.8	14.3	1501.9	-3.7
98	1001 1110	1491.25	1510.6	0.0	0.9	12.4	1517.8	-7.2
99	1001 1101	1506.88	1534.4	-0.8	-0.8	23.8	1533.7	0.7
100	1001 1100	1522.50	1546.1	-0.7	-0.8	11.6	1549.6	-3.6
101	1001 1011	1538.13	1561.7	0.8	0.8	15.7	1565.5	-3.8
102	1001 1010	1553.75	1578.0	0.8	0.8	16.2	1581.4	-3.5
103	1001 1001	1569.38	1600.4	-0.9	-0.0	22.4	1597.3	3.1
104	1001 1000	1585.00	1609.1	-0.8	-0.9	8.7	1613.2	-4.1

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3.5.3.5-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=2) 011

THRESHOLD NUMBER	A/D THRESHOLD	OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
				NOMINAL	LEVELS RATIO- LOWER	1 : 1 UPPER		POINT	DEVIATION
105	1001	0111	1600.63	1623.6	0.0	-0.8	14.5	1629.2	-5.6
106	1001	0110	1616.25	1639.1	0.8	0.8	15.6	1645.1	-5.9
107	1001	0101	1631.88	1660.0	-1.2	0.8	20.9	1661.0	-0.9
108	1001	0100	1647.50	1676.7	-0.8	-0.8	16.6	1676.9	-0.2
109	1001	0011	1663.13	1688.9	-0.8	-0.8	12.2	1692.8	-3.9
110	1001	0010	1678.75	1707.0	1.3	0.2	18.0	1708.7	-1.7
111	1001	0001	1694.38	1726.7	0.9	0.9	19.8	1724.6	2.1
112	1001	0000	1710.00	1741.5	0.0	0.7	14.8	1740.5	1.0
113	1000	1111	1725.63	1752.2	-1.1	-0.9	10.6	1756.4	-4.3
114	1000	1110	1741.25	1764.3	-1.1	-0.8	12.1	1772.3	-8.0
115	1000	1101	1756.88	1786.2	0.9	0.9	21.9	1788.2	-2.1
116	1000	1100	1772.50	1798.2	0.9	0.8	12.0	1804.2	-6.0
117	1000	1011	1788.13	1815.3	-0.9	0.0	17.1	1820.1	-4.8
118	1000	1010	1803.75	1832.1	-0.9	-0.9	16.9	1836.0	-3.8
119	1000	1001	1819.38	1852.9	-1.9	-0.9	20.8	1851.9	1.0
120	1000	1000	1835.00	1865.3	0.8	0.8	12.4	1867.8	-2.5
121	1000	0111	1850.63	1875.3	0.9	0.9	9.9	1883.7	-8.4
122	1000	0110	1866.25	1892.7	-1.0	-1.0	17.5	1899.6	-6.9
123	1000	0101	1881.88	1913.4	-0.9	-0.9	20.6	1915.5	-2.1
124	1000	0100	1897.50	1931.1	-2.4	-0.0	17.7	1931.4	-0.3
125	1000	0011	1913.13	1940.6	0.9	0.9	9.4	1947.3	-6.8
126	1000	0010	1928.75	1959.5	-0.1	0.9	19.0	1963.2	-3.7
127	1000	0001	1944.38	1980.0	-1.0	-0.9	20.4	1979.2	0.8
128	1000	0000	1960.00	1998.1	-0.7	-0.6	18.1	1995.1	3.0
129	0111	1111	1975.63	2008.4	0.9	0.9	10.3	2011.0	-2.6
130	0111	1110	1991.25	2024.3	1.0	0.9	15.9	2026.9	-2.6

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 3.5.3.5-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=2)

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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LEVELS RATIO- LOWER	1 11 UPPER		POINT	DEVIATION
131	0111 1101	2006.88	2047.9	-0.9	0.0	23.6	2047.8	5.1
132	0111 1100	2022.50	2061.4	-0.9	-0.9	13.5	2058.7	2.7
133	0111 1011	2038.13	2074.8	0.0	-0.8	13.4	2074.6	0.2
134	0111 1010	2053.75	2092.0	0.9	0.9	17.2	2090.5	1.5
135	0111 1001	2069.38	2113.1	0.6	0.9	21.1	2106.4	6.7
136	0111 1000	2085.00	2120.2	-0.8	-0.8	7.0	2122.3	-2.1
137	0111 0111	2100.63	2136.0	-0.9	-0.9	15.8	2138.2	-2.3
138	0111 0110	2116.25	2153.0	1.0	0.1	17.0	2154.2	-1.1
139	0111 0101	2131.88	2173.9	0.9	0.9	20.8	2170.1	3.8
140	0111 0100	2147.50	2191.6	0.0	0.8	17.7	2186.0	5.6
141	0111 0011	2163.13	2201.3	-0.9	-0.9	9.7	2201.9	-0.6
142	0111 0010	2178.75	2222.5	-0.9	-1.1	21.2	2217.8	4.7
143	0111 0001	2194.38	2239.0	0.8	0.9	16.5	2233.7	5.3
144	0111 0000	2210.00	2245.1	0.7	0.7	6.1	2249.6	-4.5
145	0110 1111	2225.63	2266.6	-1.0	-0.1	21.5	2265.5	1.1
146	0110 1110	2241.25	2278.4	-0.9	-0.8	11.8	2281.4	-3.1
147	0110 1101	2256.88	2300.8	0.0	-0.9	22.4	2297.3	3.5
148	0110 1100	2272.50	2312.9	0.9	0.9	12.1	2313.2	-0.3
149	0110 1011	2288.13	2327.0	0.9	1.0	14.0	2329.2	-2.2
150	0110 1010	2303.75	2346.3	-0.8	-0.8	19.3	2345.1	1.2
151	0110 1001	2319.38	2367.2	-1.0	-1.0	20.9	2361.0	6.2
152	0110 1000	2335.00	2375.5	0.8	0.0	8.3	2376.9	-1.4
153	0110 0111	2350.63	2388.1	0.9	0.9	17.6	2392.0	-4.7
154	0110 0110	2366.25	2406.0	0.2	1.1	17.9	2408.7	-2.7
155	0110 0101	2381.88	2427.6	-1.0	-0.9	21.7	2424.6	3.0
156	0110 0100	2397.50	2442.7	-0.9	-0.9	15.0	2440.5	2.2
157	0110 0011	2413.13	2453.3	0.9	0.9	10.6	2456.4	-3.1

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3.4.3.5-4 A/D THRESHOLD TEST (BAND= 5, SENSOR=2) (013

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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
158	0110 0010	2428.75	2473.9	0.9	1.1	20.5	2472.3	1.5
159	0110 0001	2444.38	2493.4	-0.9	0.1	19.5	2488.2	5.1
160	0110 0000	2460.00	2500.6	-1.0	-0.9	7.2	2504.2	-3.6
161	0101 1111	2475.63	2518.3	-4.0	-0.9	17.7	2520.1	-1.8
162	0101 1110	2491.25	2528.7	1.0	1.1	10.4	2536.0	-7.3
163	0101 1101	2506.88	2551.7	0.9	1.0	23.0	2551.9	-0.2
164	0101 1100	2522.50	2566.9	-1.0	-0.9	15.3	2567.8	-0.9
165	0101 1011	2538.13	2579.8	-0.9	-0.9	12.9	2583.7	-3.9
166	0101 1010	2553.75	2595.9	1.0	0.1	16.0	2599.6	-3.7
167	0101 1001	2569.38	2618.3	0.9	1.0	22.4	2615.5	2.8
168	0101 1000	2585.00	2626.4	-0.1	0.9	8.1	2631.4	-5.0
169	0101 0111	2600.63	2645.5	-1.1	-1.0	19.1	2647.3	-1.8
170	0101 0110	2616.25	2658.3	-1.0	-1.0	12.8	2663.3	-4.9
171	0101 0101	2631.88	2678.6	1.0	1.0	20.3	2679.2	-0.6
172	0101 0100	2647.50	2696.4	-4.9	0.9	17.8	2695.1	1.3
173	0101 0011	2663.13	2706.4	-1.0	-0.1	10.0	2711.0	-4.6
174	0101 0010	2678.75	2726.8	-1.0	-0.9	20.4	2726.9	-0.1
175	0101 0001	2694.38	2745.9	-0.1	-0.9	19.1	2742.8	3.1
176	0101 0000	2710.00	2758.4	0.9	0.9	12.5	2758.7	-0.3
177	0100 1111	2725.63	2770.2	1.0	1.0	11.8	2774.6	-4.4
178	0100 1110	2741.25	2782.9	-1.0	-0.9	12.7	2790.5	-7.7
179	0100 1101	2756.88	2805.6	-1.0	-0.9	22.7	2806.4	-0.9
180	0100 1100	2772.50	2817.6	0.8	-0.1	12.0	2822.3	-4.7
181	0100 1011	2788.13	2832.1	0.9	1.0	14.4	2838.3	-6.2
182	0100 1010	2803.75	2849.5	0.0	1.1	17.4	2854.2	-4.6
183	0100 1001	2819.38	2872.2	-1.1	-1.1	22.7	2870.1	2.2

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4.5.13.1-B AND THRESHOLD TEST (HAND= 5, SENSOR=2) DEC 01 81

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
184	0100 1000	2835.00	2885.5	-0.9	-0.9	13.3	2886.0	-0.5
185	0100 0111	2850.63	2897.5	-3.5	1.1	12.0	2901.9	-4.4
186	0100 0110	2866.25	2910.7	1.0	0.9	13.2	2917.8	-7.1
187	0100 0101	2881.88	2932.6	-1.1	-0.0	21.9	2933.7	-1.1
188	0100 0100	2897.50	2947.7	-1.0	-1.0	15.1	2949.6	-1.9
189	0100 0011	2913.13	2959.6	-0.1	-1.1	11.9	2965.5	-5.9
190	0100 0010	2928.75	2979.4	0.9	1.0	19.8	2981.4	-2.0
191	0100 0001	2944.38	2998.4	0.9	1.0	19.0	2997.3	1.1
192	0100 0000	2960.00	3015.6	-1.0	-0.8	17.2	3013.3	2.4
193	0011 1111	2975.63	3027.9	-2.8	-1.1	12.2	3029.2	-1.3
194	0011 1110	2991.25	3038.7	0.9	-0.6	10.9	3045.1	-6.3
195	0011 1101	3006.88	3063.2	-0.8	1.0	24.4	3061.0	2.2
196	0011 1100	3022.50	3074.2	0.0	1.0	11.0	3076.9	-2.7
197	0011 1011	3038.13	3089.7	-1.0	-1.0	15.5	3092.8	-3.1
198	0011 1010	3053.75	3106.3	-0.9	-1.1	16.6	3108.7	-2.4
199	0011 1001	3069.38	3128.4	1.0	1.0	22.1	3124.6	3.8
200	0011 1000	3085.00	3133.4	1.0	1.0	5.0	3140.5	-7.1
201	0011 0111	3100.63	3151.2	-1.0	4.8	17.8	3156.4	-5.2
202	0011 0110	3116.25	3168.5	-1.1	-0.9	17.3	3172.3	-3.9
203	0011 0101	3131.88	3190.1	-0.0	0.3	21.6	3188.3	1.9
204	0011 0100	3147.50	3206.5	-5.8	1.0	16.4	3204.2	2.3
205	0011 0011	3163.13	3216.1	1.0	1.0	9.6	3220.1	-4.0
206	0011 0010	3178.75	3237.1	-1.1	-0.9	21.0	3236.0	1.1
207	0011 0001	3194.38	3257.4	-1.1	-1.1	20.3	3251.9	5.5
208	0011 0000	3210.00	3268.1	0.8	-0.0	10.7	3267.8	0.3
209	0010 1111	3225.63	3281.7	1.0	1.1	13.6	3283.7	-2.0

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3.5.3.5-A A/D THRESHOLD TEST (BAND= 5, SENSOR=2)

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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
210	0010.1110	3241.25	3293.1	0.1	1.1	11.4	3299.6	-6.6
211	0010.1101	3256.88	3319.4	-1.1	-1.0	26.4	3315.5	3.9
212	0010.1100	3272.50	3329.2	-1.0	4.3	9.8	3331.4	-2.2
213	0010.1011	3288.13	3343.9	1.0	1.1	14.7	3347.3	-3.5
214	0010.1010	3303.75	3360.8	1.0	1.1	16.9	3363.3	-2.4
215	0010.1001	3319.38	3384.6	-1.1	0.1	23.8	3379.2	5.4
216	0010.1000	3335.00	3393.8	-1.0	-0.9	9.2	3395.1	-1.3
217	0010.0111	3350.63	3411.3	-4.7	-1.0	17.4	3411.0	0.3
218	0010.0110	3366.25	3423.0	1.0	1.1	11.7	3426.9	-3.9
219	0010.0101	3381.88	3446.0	-0.6	1.0	23.0	3442.8	3.2
220	0010.0100	3397.50	3459.3	-1.1	-1.0	13.3	3458.7	0.6
221	0010.0011	3413.13	3472.7	-1.1	-1.1	13.4	3474.6	-1.9
222	0010.0010	3428.75	3492.0	0.9	0.0	19.3	3490.5	1.5
223	0010.0001	3444.38	3512.1	1.0	1.2	20.0	3506.4	5.6
224	0010.0000	3460.00	3522.4	-0.0	1.1	10.4	3522.3	0.1
225	0001.1111	3475.63	3537.3	-1.2	-1.1	14.8	3538.3	-1.0
226	0001.1110	3491.25	3548.9	-1.1	-1.0	11.6	3554.2	-5.3
227	0001.1101	3506.88	3573.9	-5.0	1.0	25.0	3570.1	3.8
228	0001.1100	3522.50	3584.9	1.0	1.1	11.0	3586.0	-1.1
229	0001.1011	3538.13	3600.2	-1.1	-0.0	15.3	3601.9	-1.7
230	0001.1010	3553.75	3616.7	-1.2	-1.1	16.4	3617.8	-1.1
231	0001.1001	3569.38	3639.9	-0.1	-1.0	23.3	3633.7	6.2
232	0001.1000	3585.00	3646.1	1.1	1.1	6.2	3649.6	-3.5
233	0001.0111	3600.63	3665.5	1.0	1.1	19.4	3665.5	-0.0
234	0001.0110	3616.25	3679.1	-1.2	-1.2	13.5	3681.4	-2.4
235	0001.0101	3631.88	3703.3	-1.3	-1.0	24.2	3697.3	5.9
236	0001.0100	3647.50	3717.5	-5.6	-0.0	14.2	3713.3	4.2

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 22
 1981/12/01 07:52:20 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 3.5.3.5-13 AND THRESHOLD TEST (BAND= 5, SENSOR=2)

HAC
TEST
527

DEC 01 '81

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
237	0001 0911	3663.13	3727.6	1.0	1.1	10.1	3729.2	-1.5
238	0001 0010	3678.75	3746.9	-0.1	1.1	19.3	3745.1	1.8
239	0001 0001	3694.38	3769.1	-1.3	-1.1	22.2	3761.0	8.1
240	0001 0000	3710.00	3784.7	-1.1	-1.0	15.6	3776.9	7.8
241	0000 1111	3725.63	3793.3	1.0	1.2	8.5	3792.8	0.5
242	0000 1110	3741.25	3805.3	1.0	1.0	12.0	3808.7	-3.5
243	0000 1101	3756.88	3825.4	-1.2	7.0	20.1	3824.6	0.8
244	0000 1100	3772.50	3841.4	-1.2	-1.0	16.0	3840.5	0.8
245	0000 1011	3788.13	3863.1	-5.6	-1.0	21.7	3856.4	6.6
246	0000 1010	3803.75	3872.7	0.9	1.1	9.6	3872.3	0.3
247	0000 1001	3819.38	3896.2	1.0	1.1	23.6	3888.3	8.0
248	0000 1000	3835.00	3910.2	-1.2	-1.0	14.0	3904.2	6.1
249	0000 0111	3850.63	3924.2	-1.3	-1.1	13.9	3920.1	4.1
250	0000 0110	3866.25	3935.7	0.9	0.1	11.5	3936.0	-0.3
251	0000 0101	3881.88	3960.0	-5.0	1.3	24.3	3951.9	8.1
252	0000 0100	3897.50	3971.7	-0.1	1.1	11.7	3967.8	3.9
253	0000 0011	3913.13	3986.6	-1.2	-1.1	14.8	3983.7	2.9
254	0000 0010	3928.75	4006.3	-1.2	-1.1	19.8	3999.6	6.7
255	0000 0001	3944.38	4026.0	1.0	1.2	19.6	4015.5	10.5

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HAC
TEST
S27

DEC 01 7

HS-236 THMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 23
 1981/12/01 07:58:45 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP,
 3.5+3.5-4 A/D THRESHOLD TEST (BAND= 5, SENSOR=3)
 S U M M A R Y

CHECK 1) RMS ERROR, 2) THRESHOLD INCREMENT(+/- 0.0 <= THRH INC <= 31.2)
 THE REMAINING DATA ARE FOR INFORMATION ONLY

TEST FIT STRAIGHT LINE IS: $Y = 15.852X - 42.7MV$

DEVIATION OF SLOPE FROM IDEAL IS: 1.453%
 OFFSET IS: -42.7MV
 COEFFICIENT OF DETERMINATION IS: $R^2 = .99999140$
 ANALOG INPUT DURING DC RESTORE IS: 63.9MV

RMS ERROR = 3.260MV REGRM: RMS ERROR <= 7.812MV

THRESHOLD INCREMENT MEASUREMENT

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
25.9MV	227	15.891MV	7.3MV	189	3.664MV

LOWER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
2.1MV	107	-0.193MV	-6.5MV	204	1.069MV

UPPER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
4.0MV	252	0.060MV	-1.6MV	129	.881MV

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HS 236 THEMATIC MAPPER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 24

1981/12/01 07:58:59 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.5-F A/D THRESHOLD TEST (SAND= 5, SENSOR=3)

HAC
TEST
S27

00017

THRESHOLD A/D OUTPUT NUMBER THRESHOLD	TDFAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
		NOMINAL	LOWER	UPPER		POINT	DEVIATION

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

1	1111 1111	-24.375	-29.8	-0.3	-0.6		-26.8	-3.0
2	1111 1110	-8.750	-14.1	0.8	0.8	15.7	-11.0	-3.1
3	1111 1101	6.875	5.7	0.8	0.8	19.8	4.9	0.8
4	1111 1100	22.500	19.4	-0.9	-0.9	13.7	20.7	-1.3
5	1111 1011	38.125	36.3	-0.7	-0.7	16.9	36.6	-0.3
6	1111 1010	53.750	54.1	0.7	0.0	17.8	52.5	1.7
7	1111 1001	69.375	72.1	0.6	0.7	17.9	68.3	3.8
8	1111 1000	85.000	82.0	0.0	0.9	9.9	84.2	-2.2
9	1111 0111	100.625	97.8	-0.7	-0.6	15.8	100.0	-2.2
10	1111 0110	116.250	116.3	-0.8	-0.7	18.5	115.9	0.5
11	1111 0101	131.875	133.6	0.7	0.8	17.3	131.7	1.9
12	1111 0100	147.500	151.2	0.8	0.9	17.5	147.6	3.6
13	1111 0011	163.125	163.8	-0.8	-0.1	17.6	163.4	0.3
14	1111 0010	178.750	184.5	-0.8	-0.7	20.8	179.3	5.3
15	1111 0001	194.375	200.1	-0.1	-0.7	15.6	195.1	5.0
16	1111 0000	210.000	211.0	-1.4	0.7	10.9	211.0	0.1
17	1110 1111	225.625	224.3	0.7	0.7	13.2	226.8	-2.6
18	1110 1110	241.250	241.5	-0.7	-0.7	17.2	242.7	-1.2
19	1110 1101	256.875	261.0	-0.8	-0.7	19.5	258.5	2.5
20	1110 1100	272.500	275.8	0.8	0.0	14.8	274.4	1.4
21	1110 1011	288.125	290.1	0.7	0.7	14.3	290.2	-0.1
22	1110 1010	303.750	308.8	0.1	0.7	18.7	304.1	2.8
23	1110 1001	319.375	327.3	-0.7	-0.6	18.4	321.9	5.3
24	1110 1000	335.000	341.0	-0.9	-0.9	13.7	337.8	3.2
25	1110 0111	350.625	351.5	0.6	0.6	10.5	353.6	-2.1

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 25

1981/12/01 07:58:59 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.5-4 A/D THRESHOLD TEST (BAND= 5, SENSOR=3)



DEC 01 '81

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
26	1110 0110	366.250	370.2	0.6	0.7	18.6	369.5	0.7
27	1110 0101	381.875	388.7	-0.8	0.0	18.6	385.3	3.4
28	1110 0100	397.500	408.2	-0.7	-0.7	19.4	401.2	7.0
29	1110 0011	413.125	418.0	0.0	-0.6	9.8	417.0	0.9
30	1110 0010	428.750	438.2	0.7	0.7	20.3	432.9	3.3
31	1110 0001	444.375	453.7	0.6	0.7	15.5	448.8	4.9
32	1110 0000	460.000	461.8	-0.8	-0.7	8.1	464.6	-2.8
33	1101 1111	475.625	478.0	-0.7	-0.6	16.2	480.5	-2.4
34	1101 1110	491.250	493.1	0.6	0.0	15.1	496.3	-3.2
35	1101 1101	506.875	513.1	0.7	0.7	20.0	512.2	0.9
36	1101 1100	522.500	526.0	-0.8	0.8	12.9	528.0	-2.0
37	1101 1011	538.125	543.8	-0.7	-0.6	17.8	543.9	-0.1
38	1101 1010	553.750	561.6	-0.8	-0.8	17.8	559.7	1.9
39	1101 1001	569.375	579.4	0.6	0.7	17.8	575.6	3.8
40	1101 1000	585.000	591.4	0.8	0.8	11.9	591.4	-0.1
41	1101 0111	600.625	605.0	-0.6	0.0	13.6	607.3	-2.3
42	1101 0110	616.250	622.9	-0.7	-0.7	17.8	623.1	-0.3
43	1101 0101	631.875	641.1	0.0	-0.7	18.2	639.0	2.1
44	1101 0100	647.500	657.8	1.3	1.3	16.7	654.8	3.0
45	1101 0011	663.125	670.0	-0.1	0.6	12.2	670.7	-0.7
46	1101 0010	678.750	690.6	-0.7	-0.7	20.7	686.5	4.1
47	1101 0001	694.375	706.7	-0.7	-0.7	16.1	702.4	4.3
48	1101 0000	710.000	720.8	0.6	0.0	14.1	718.2	2.6
49	1100 1111	725.625	730.9	0.6	0.6	10.1	734.1	-3.2
50	1100 1110	741.250	746.7	-0.8	0.7	15.8	749.9	-3.2
51	1100 1101	756.875	767.1	-0.8	-0.7	20.3	765.8	1.3

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HS-206 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 26
 1981/12/01 07:58:59 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 B.5.3.5-B A/D THRESHOLD TEST (BAND= 5, SENSOR=3)

HAC
TEST
S27

DC 01 '81

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LEVELS RATIO= 1:1 LOWER	UPPER		POINT	DEVIATION
52	1100.1100	772.500	782.6	-0.1	-0.9	15.5	781.6	1.0
53	1100.1011	788.125	796.2	0.7	0.7	13.6	797.5	-1.3
54	1100.1010	803.750	814.5	0.7	0.8	18.3	813.3	1.2
55	1100.1001	819.375	833.0	-0.6	-0.0	18.4	829.2	3.8
56	1100.1000	835.000	850.0	-0.5	-0.5	17.0	845.1	5.0
57	1100.0111	850.625	857.8	-0.0	-0.6	7.8	860.9	-3.1
58	1100.0110	866.250	875.0	0.8	0.7	17.2	876.8	-1.7
59	1100.0101	881.875	893.0	-0.1	0.7	17.9	892.6	0.3
60	1100.0100	897.500	913.4	-1.1	-0.9	20.4	908.5	4.9
61	1100.0011	913.125	923.0	-0.7	-0.7	9.6	924.3	-1.3
62	1100.0010	928.750	942.6	0.7	0.6	19.6	940.2	2.4
63	1100.0001	944.375	958.3	0.7	0.8	15.7	956.0	2.3
64	1100.0000	960.000	974.0	0.0	0.9	15.8	971.9	2.2
65	1011.1111	975.625	986.7	-0.7	-0.7	12.6	987.7	-1.0
66	1011.1110	991.250	1002.0	0.1	-0.7	15.3	1003.6	-1.6
67	1011.1101	1006.875	1021.6	0.6	0.6	19.5	1019.4	2.1
68	1011.1100	1022.500	1033.3	0.8	0.8	11.7	1035.3	-2.0
69	1011.1011	1038.125	1052.0	-0.7	0.0	18.7	1051.1	0.9
70	1011.1010	1053.750	1069.1	-0.9	-0.8	17.0	1067.0	2.1
71	1011.1001	1069.375	1088.2	0.1	-0.7	19.1	1082.8	5.4
72	1011.1000	1085.000	1096.5	0.7	0.8	0.3	1098.7	-2.2
73	1011.0111	1100.625	1112.3	0.1	0.7	15.8	1114.5	-2.3
74	1011.0110	1116.250	1130.4	-0.7	-0.7	18.1	1130.4	0.0
75	1011.0101	1131.875	1148.6	-0.6	-0.7	18.1	1146.2	2.3
76	1011.0100	1147.500	1165.3	0.8	-0.1	16.8	1162.1	3.3
77	1011.0011	1163.125	1177.4	0.8	0.8	12.1	1177.9	-0.5
78	1011.0010	1178.750	1197.2	0.0	0.7	19.7	1193.8	3.4

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 27

1981/12/01 07:58:59 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.5-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=3)

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T1.1
521

01018

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LEVELS RATIO= LOWER	UPPER		POINT	DEVIATION
79	1011 0001	1194.38	1214.2	-0.7	-0.7	17.1	1209.6	4.6
80	1011 0000	1210.00	1225.3	-0.0	-0.8	11.1	1225.5	-0.2
81	1010 1111	1225.63	1238.5	0.7	0.7	13.1	1241.3	-2.9
82	1010 1110	1241.25	1253.9	0.6	0.8	15.4	1257.2	-3.3
83	1010 1101	1256.88	1274.7	-0.7	0.1	20.8	1273.1	1.7
84	1010 1100	1272.50	1288.9	-0.8	-0.9	14.2	1288.9	0.0
85	1010 1011	1288.13	1304.3	-0.1	-0.7	15.4	1304.8	-0.4
86	1010 1010	1303.75	1321.3	0.7	0.7	17.0	1320.6	0.7
87	1010 1001	1319.38	1339.6	0.0	0.8	18.3	1336.5	3.1
88	1010 1000	1335.00	1353.9	-0.8	-0.8	14.3	1352.3	1.6
89	1010 0111	1350.63	1365.2	-0.7	-0.7	11.2	1368.2	-3.0
90	1010 0110	1366.25	1382.0	0.8	-0.0	16.8	1384.0	-2.0
91	1010 0101	1381.88	1400.0	0.5	0.5	18.0	1399.9	0.2
92	1010 0100	1397.50	1417.8	-0.1	0.6	17.7	1415.7	2.0
93	1010 0011	1413.13	1430.3	-0.7	-0.7	12.5	1431.6	-1.3
94	1010 0010	1428.75	1450.1	0.0	-0.7	19.8	1447.4	2.7
95	1010 0001	1444.38	1465.5	0.7	0.7	15.4	1463.3	2.2
96	1010 0000	1460.00	1478.3	0.4	0.5	12.7	1479.1	-0.9
97	1001 1111	1475.63	1490.2	-0.7	-0.0	11.9	1495.0	-4.8
98	1001 1110	1491.25	1505.0	-0.7	-0.7	14.8	1510.8	-5.9
99	1001 1101	1506.88	1525.7	-0.1	-0.7	20.8	1526.7	-1.0
100	1001 1100	1522.50	1536.2	0.9	0.9	10.5	1542.5	-6.3
101	1001 1011	1538.13	1554.7	-0.0	0.7	18.5	1558.4	-3.7
102	1001 1010	1553.75	1571.6	-0.9	-0.9	16.9	1574.2	-2.6
103	1001 1001	1569.38	1591.2	-0.8	-0.8	19.5	1590.1	1.1
104	1001 1000	1585.00	1601.5	0.8	-0.1	10.3	1605.9	-4.4

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 28
 1981/12/01 07:58:59 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 3.5.3.5-B A/D THRESHOLD TEST (BAND= 5, SENSOR=3) DC 01 71

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
105	1001 0111	1600.63	1615.5	0.7	0.7	14.0	1621.8	-6.2
106	1001 0110	1616.25	1632.3	0.1	0.7	16.7	1637.6	-5.4
107	1001 0101	1631.88	1651.9	2.1	-0.1	19.7	1653.5	-1.6
108	1001 0100	1647.50	1665.7	0.0	-0.8	13.8	1669.4	-3.6
109	1001 0011	1663.13	1680.7	0.7	0.7	14.9	1685.2	-4.5
110	1001 0010	1678.75	1700.3	0.7	0.7	19.6	1701.1	-0.8
111	1001 0001	1694.38	1717.3	-0.7	-0.1	17.1	1716.9	0.4
112	1001 0000	1710.00	1735.0	-0.8	-0.8	17.6	1732.8	2.2
113	1000 1111	1725.63	1744.3	-2.1	-0.8	9.3	1748.6	-4.3
114	1000 1110	1741.25	1756.4	0.8	0.8	12.1	1764.5	-8.1
115	1000 1101	1756.88	1777.1	-0.1	3.7	20.7	1780.3	-3.3
116	1000 1100	1772.50	1791.7	-0.9	-0.9	14.6	1796.2	-4.5
117	1000 1011	1788.13	1807.4	-0.8	-0.8	15.7	1812.0	-4.6
118	1000 1010	1803.75	1823.8	0.8	0.0	16.4	1827.9	-4.1
119	1000 1001	1819.38	1842.1	0.9	0.9	18.4	1843.7	-1.6
120	1000 1000	1835.00	1858.6	0.0	1.1	16.5	1859.6	-1.0
121	1000 0111	1850.63	1868.1	-0.8	-0.8	9.5	1875.4	-7.3
122	1000 0110	1866.25	1885.1	0.0	-0.8	16.9	1891.3	-6.2
123	1000 0101	1881.88	1906.0	-1.4	-1.6	20.9	1907.1	-1.2
124	1000 0100	1897.50	1922.7	1.8	1.8	16.7	1923.0	-0.3
125	1000 0011	1913.13	1933.1	-0.7	0.1	10.4	1938.8	-5.7
126	1000 0010	1928.75	1952.8	-1.0	-1.1	19.7	1954.7	-1.9
127	1000 0001	1944.38	1969.0	0.1	-0.8	16.3	1970.5	-1.5
128	1000 0000	1960.00	1990.4	0.8	0.8	21.3	1986.4	4.0
129	0111 1111	1975.63	2002.5	-2.4	-1.6	12.1	2002.2	0.3
130	0111 1110	1991.25	2017.4	-0.9	-0.9	14.8	2018.1	-0.7

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 29
 1981/12/01 07:58:59 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 8.5.3.5-B A/D THRESHOLD TEST (BAND= 5, SENSOR=3)



DEC 01 '81

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LEVELS RATIO= 1:1 LOWER	UPPER		POINT	DEVIATION
131	0111 1101	2006.88	2035.8	-0.8	-0.8	18.4	2033.9	1.8
132	0111 1100	2022.50	2052.7	0.9	0.0	16.9	2049.8	2.9
133	0111 1011	2038.13	2065.5	0.7	0.8	12.8	2065.7	-0.2
134	0111 1010	2053.75	2084.0	0.1	0.9	18.5	2081.5	2.5
135	0111 1001	2069.38	2104.7	-0.9	-0.9	20.7	2097.4	7.3
136	0111 1000	2085.00	2112.3	0.0	-0.8	7.7	2113.2	-0.9
137	0111 0111	2100.63	2126.4	0.7	0.7	14.1	2129.1	-2.6
138	0111 0110	2116.25	2144.9	0.8	0.8	18.5	2144.9	0.0
139	0111 0101	2131.88	2162.3	-1.0	0.0	17.3	2160.8	1.5
140	0111 0100	2147.50	2183.7	-0.8	-0.9	21.5	2176.6	7.1
141	0111 0011	2163.13	2192.3	0.1	-0.8	8.5	2192.5	-0.2
142	0111 0010	2178.75	2213.1	0.8	0.8	20.8	2208.3	4.8
143	0111 0001	2194.38	2227.6	0.1	0.8	14.4	2224.2	3.4
144	0111 0000	2210.00	2242.1	-0.7	-0.7	14.6	2240.0	2.1
145	0110 1111	2225.63	2253.3	-0.7	-0.8	11.2	2255.9	-2.5
146	0110 1110	2241.25	2269.0	0.8	0.1	15.7	2271.7	-2.7
147	0110 1101	2256.88	2292.3	-4.3	0.8	23.3	2287.6	4.7
148	0110 1100	2272.50	2304.2	0.0	0.9	11.9	2303.4	0.8
149	0110 1011	2288.13	2318.6	-0.8	-0.8	14.3	2319.3	-0.7
150	0110 1010	2303.75	2337.4	-0.0	-0.7	18.9	2335.1	2.3
151	0110 1001	2319.38	2353.4	0.9	0.9	15.9	2351.0	2.4
152	0110 1000	2335.00	2367.2	0.9	0.9	13.8	2366.8	0.4
153	0110 0111	2350.63	2379.5	-0.8	-0.1	12.2	2382.7	-3.2
154	0110 0110	2366.25	2398.2	-0.8	-0.8	18.7	2398.5	-0.3
155	0110 0101	2381.88	2414.3	-0.0	-0.9	16.1	2414.4	-0.1
156	0110 0100	2397.50	2433.0	0.8	0.8	18.7	2430.2	2.7
157	0110 0011	2413.13	2443.7	0.0	0.8	10.7	2446.1	-2.4

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OF POOR QUALITY

ISS-236 THEMATIC MAPPER MUX UNIT TEST MODEL., FLT. S/N 3 PAGE 30

1981/12/01 07:58:59 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.1.1.3.5-B A/D THRESHOLD TEST (BAND= 5, SENSOR=3)



DC0181

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
158	0110 0010	2428.75	2465.7	-1.0	-0.8	22.0	2462.0	3.7
159	0110 0001	2444.38	2460.5	-0.8	-0.8	14.8	2477.8	2.6
160	0110 0000	2460.00	2490.9	1.1	-0.1	10.4	2493.7	-2.8
161	0101 1111	2475.63	2506.0	-1.4	1.0	15.1	2509.5	-3.5
162	0101 1110	2491.25	2519.7	-0.0	0.9	13.7	2525.4	-5.6
163	0101 1101	2506.88	2544.7	-0.7	-0.8	24.9	2541.2	3.5
164	0101 1100	2522.50	2557.5	-3.9	-0.9	12.9	2557.1	0.5
165	0101 1011	2538.13	2569.1	0.8	0.8	11.5	2572.9	-3.8
166	0101 1010	2553.75	2586.9	0.8	0.9	17.8	2588.8	-1.9
167	0101 1001	2569.38	2605.2	-0.9	0.1	18.3	2604.6	0.5
168	0101 1000	2585.00	2617.8	-0.8	-0.8	12.6	2620.5	-2.7
169	0101 0111	2600.63	2630.9	0.0	-0.8	13.1	2636.3	-5.5
170	0101 0110	2616.25	2648.0	0.9	0.9	17.1	2652.2	-4.2
171	0101 0101	2631.88	2664.6	0.0	0.8	16.6	2668.0	-3.5
172	0101 0100	2647.50	2681.8	-1.0	-1.0	17.2	2683.9	-2.1
173	0101 0011	2663.13	2696.0	-0.8	-0.8	14.2	2699.7	-3.8
174	0101 0010	2678.75	2715.9	0.8	-0.1	19.9	2715.6	0.3
175	0101 0001	2694.38	2730.9	0.9	0.9	15.1	2731.4	-0.5
176	0101 0000	2710.00	2748.2	0.0	0.8	17.2	2747.3	0.9
177	0100 1111	2725.63	2759.5	-1.0	-1.0	11.3	2763.1	-3.7
178	0100 1110	2741.25	2772.9	0.0	-0.8	13.4	2779.0	-6.1
179	0100 1101	2756.88	2796.3	-4.8	0.8	23.4	2794.8	1.4
180	0100 1100	2772.50	2807.6	0.9	0.9	11.3	2810.7	-3.1
181	0100 1011	2788.13	2822.4	-0.8	-0.1	14.8	2826.5	-4.1
182	0100 1010	2803.75	2840.5	-0.8	-0.8	18.1	2842.4	-1.9
183	0100 1001	2819.38	2857.5	-0.0	-1.0	17.0	2858.3	-0.7

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 31
 1981/12/01 07:58:59 PENALTY TEST FULL PREFORMANCE @ AMBIENT TEMP.
 3.5.2.5-3 A/D THRESHOLD TEST (BAND= 5, SENSOR=3)



0101

THRESHOLD NUMBER	A/D THRESHOLD	OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
				NOMINAL	LEVELS RATIO= 1:1 LOWER	UPPER		POINT	DEVIATION
184	0100	1000	2835.00	2874.8	0.8	0.9	17.2	2874.1	0.7
185	0100	0111	2850.63	2882.6	0.0	0.9	7.8	2890.0	-7.4
186	0100	0110	2866.25	2901.4	-0.8	-0.9	18.8	2905.8	-4.5
187	0100	0101	2881.88	2917.7	-0.9	-0.8	16.3	2921.7	-4.0
188	0100	0100	2897.50	2940.3	-2.6	0.0	22.6	2937.5	2.8
189	0100	0011	2913.13	2947.6	0.9	0.9	7.3	2953.4	-5.8
190	0100	0010	2928.75	2968.7	-0.1	0.9	21.1	2969.2	-0.5
191	0100	0001	2944.38	2984.5	-1.0	-1.0	15.6	2985.1	-0.8
192	0100	0000	2960.00	3004.1	0.1	-0.9	19.8	3000.9	3.2
193	0011	1111	2975.63	3014.0	-1.4	1.0	9.9	3016.8	-2.8
194	0011	1110	2991.25	3027.7	0.9	0.9	13.7	3032.6	-4.9
195	0011	1101	3006.88	3053.5	-0.9	0.1	25.8	3048.5	5.0
196	0011	1100	3022.50	3064.4	-1.0	-1.0	10.9	3064.3	0.1
197	0011	1011	3038.13	3078.1	0.0	-0.8	13.7	3080.2	-2.1
198	0011	1010	3053.75	3094.5	1.0	1.1	16.4	3096.0	-1.5
199	0011	1001	3069.38	3112.5	-0.1	1.0	18.0	3111.9	0.6
200	0011	1000	3085.00	3123.4	-1.0	-1.0	10.9	3127.7	-4.3
201	0011	0111	3100.63	3139.5	-0.9	-0.8	16.1	3143.6	-4.1
202	0011	0110	3116.25	3156.5	0.7	-0.1	17.0	3159.4	-3.0
203	0011	0101	3131.88	3173.3	0.8	0.8	16.8	3175.3	-2.0
204	0011	0100	3147.50	3194.8	-6.5	1.0	21.5	3191.1	3.7
205	0011	0011	3163.13	3205.1	-1.0	-0.9	10.3	3207.0	-1.9
206	0011	0010	3178.75	3225.2	-0.1	-0.5	20.1	3222.8	2.4
207	0011	0001	3194.38	3240.0	1.0	1.0	14.8	3238.7	1.3
208	0011	0000	3210.00	3251.1	1.2	1.2	11.1	3254.6	-3.4
209	0010	1111	3225.63	3269.0	-1.0	0.1	17.9	3270.4	-1.4

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HS-206 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 32

1981/12/01 07:58:59 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.13.3.1-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=3)

HAC
TEST
527

UL 01 81

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
210	0010 1110	3241.25	3283.0	-0.9	-0.9	13.9	3286.3	-3.3
211	0010 1101	3256.88	3307.6	-6.4	-0.9	24.6	3302.1	5.5
212	0010 1100	3272.50	3316.5	0.9	0.9	8.8	3318.0	-1.5
213	0010 1011	3288.13	3331.5	-0.0	0.9	15.0	3333.8	-2.3
214	0010 1010	3303.75	3350.1	-1.0	-0.9	18.5	3349.7	0.4
215	0010 1001	3319.38	3367.7	-1.1	-1.0	17.6	3365.5	2.2
216	0010 1000	3335.00	3380.9	0.7	-0.1	13.2	3381.4	-0.4
217	0010 0111	3350.63	3393.1	0.8	1.0	12.2	3397.2	-4.1
218	0010 0110	3366.25	3411.0	-0.1	0.9	17.9	3413.1	-2.0
219	0010 0101	3381.88	3428.7	-0.9	-0.9	17.6	3428.9	-0.2
220	0010 0100	3397.50	3447.1	-0.1	-1.0	18.4	3444.8	2.3
221	0010 0011	3413.13	3458.8	0.8	0.9	11.8	3460.6	-1.8
222	0010 0010	3428.75	3479.4	0.8	0.9	20.6	3476.5	3.0
223	0010 0001	3444.38	3495.8	-1.1	0.0	16.3	3492.3	3.4
224	0010 0000	3460.00	3507.0	-1.3	3.0	11.2	3508.2	-1.2
225	0001 1111	3475.63	3523.0	-0.1	-0.9	16.0	3524.0	-1.0
226	0001 1110	3491.25	3535.1	0.9	1.0	12.1	3539.9	-4.7
227	0001 1101	3506.88	3561.0	-0.2	1.0	25.9	3555.7	5.3
228	0001 1100	3522.50	3573.4	-1.1	-1.0	12.4	3571.6	1.8
229	0001 1011	3538.13	3586.7	-0.9	-0.8	13.2	3587.4	-0.8
230	0001 1010	3553.75	3602.5	0.8	0.0	15.8	3603.3	-0.8
231	0001 1001	3569.38	3621.0	0.9	1.0	18.5	3619.1	1.9
232	0001 1000	3585.00	3633.3	-0.1	1.0	12.2	3635.0	-1.7
233	0001 0111	3600.63	3648.7	-1.0	-0.9	15.4	3650.9	-2.2
234	0001 0110	3616.25	3665.9	-0.1	-0.9	17.2	3666.7	-0.8
235	0001 0101	3631.88	3682.5	0.8	1.0	16.6	3682.6	-0.1
236	0001 0100	3647.50	3697.5	1.0	1.1	15.1	3698.4	-0.9

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HS-236 THEMATIC MAPPER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 33

1981/12/01 07:58:59 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.5-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=3)

HAC
TEST
527

DL 01 '81

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LEVELS RATIO= 1 : 1 LOWER	UPPER		POINT	DEVIATION
237	0001 0011	3663.13	3714.7	-1.0	-0.0	17.2	3714.3	0.5
238	0001 0010	3678.75	3734.4	-0.8	-0.6	19.6	3730.1	4.3
239	0001 0001	3694.38	3750.6	-0.1	-1.0	16.2	3746.0	4.6
240	0001 0000	3710.00	3770.2	0.7	0.8	19.6	3761.8	8.3
241	0000 1111	3725.63	3780.5	-2.3	1.2	10.3	3777.7	2.8
242	0000 1110	3741.25	3792.6	-1.1	-0.9	12.2	3793.5	-0.9
243	0000 1101	3756.88	3818.1	-1.2	-0.9	25.4	3809.4	8.7
244	0000 1100	3772.50	3826.7	1.0	0.0	8.6	3825.2	1.4
245	0000 1011	3788.13	3842.3	0.8	0.9	15.6	3841.1	1.2
246	0000 1010	3803.75	3859.1	-0.1	1.0	16.8	3856.9	2.1
247	0000 1001	3819.38	3878.5	-1.2	-1.0	19.4	3872.8	5.7
248	0000 1000	3835.00	3895.6	-0.1	1.2	17.2	3888.6	7.0
249	0000 0111	3850.63	3904.4	0.9	0.9	8.8	3904.5	-0.1
250	0000 0110	3866.25	3921.9	0.7	0.9	17.5	3920.3	1.6
251	0000 0101	3881.88	3940.1	-1.0	0.1	18.2	3936.2	4.0
252	0000 0100	3897.50	3959.1	-1.2	4.5	18.9	3952.0	7.0
253	0000 0011	3913.13	3971.7	-0.1	-0.9	12.6	3967.9	3.8
254	0000 0010	3928.75	3990.9	0.8	0.9	19.1	3983.7	7.1
255	0000 0001	3944.38	4006.5	-0.2	1.1	15.6	3999.6	6.9

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FL1. S/N 3 PAGE 34

1981/12/01 00:05:23 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.5-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=4) HAC
TEST
527
RC01
S U M M A R Y

CHECK 1) RMS ERROR, 2) THRESHOLD INCREMENT(+/- 0.0 <= THRH INC <= 31.2)
THE REMAINING DATA ARE FOR INFORMATION ONLY

BEST FL1 STRAIGHT LINE IS: $Y = 15.976X - 41.6MV$

DEVIATION OF SLOPE FROM IDEAL IS: 2.246%

OFFSET IS: -41.6MV

COEFFICIENT OF DETERMINATION IS: $R^2 = .99999340$

ANALOG INPUT DURING DC RESTORE IS: 63.8MV

RMS ERROR = 3.414MV REGRIT: RMS ERROR <= 7.812MV

THRESHOLD INCREMENT MEASUREMENT

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
22.9MV	128	16.023MV	7.4MV	57	3.573MV

LOWER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
1.0MV	218	-0.111MV	-5.7MV	236	.090MV

UPPER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
2.4MV	191	0.012MV	-1.1MV	252	.803MV

TEST PASSED

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 35
 1981/12/01 08:05:37 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 G.H.G.S-H A/D THRESHOLD TEST (BAND= 5, SENSOR=4)

HAC
T.M.F
S27

0001'81

THRESHOLD A/D OUTPUT NUMBER THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
		LEVELS RATIO= 1:1 NOMINAL LOWER UPPER	POINT	DEVIATION			

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

1	1111 1111	-24.375	-30.3	-1.4	-0.7		-25.6	-4.6
2	1111 1110	-8.750	-13.8	0.7	-0.0	16.5	-9.7	-4.1
3	1111 1101	6.875	6.2	0.6	0.7	20.0	6.3	-0.1
4	1111 1100	22.500	20.8	-0.1	0.7	14.6	22.3	-1.5
5	1111 1011	38.125	36.6	-0.8	-0.8	15.8	38.3	-1.7
6	1111 1010	53.750	55.6	-0.0	-0.7	19.0	54.2	1.4
7	1111 1001	69.375	72.6	0.7	0.8	17.0	70.2	2.4
8	1111 1000	85.000	83.5	0.6	0.7	10.8	86.2	-2.7
9	1111 0111	100.625	98.6	-0.8	-0.0	15.2	102.2	-3.5
10	1111 0110	116.250	117.7	-0.8	-0.7	19.1	118.1	-0.4
11	1111 0101	131.875	136.7	-0.1	-0.8	19.0	134.1	2.6
12	1111 0100	147.500	153.3	0.7	0.8	16.6	150.1	3.2
13	1111 0011	163.125	164.5	-0.1	0.7	11.2	166.1	-1.6
14	1111 0010	178.750	186.7	-0.8	-0.7	22.2	182.0	4.7
15	1111 0001	194.375	202.1	-0.9	-0.8	15.3	198.0	4.0
16	1111 0000	210.000	213.3	0.7	0.0	11.2	214.0	-0.7
17	1110 1111	225.625	226.3	0.7	0.8	13.0	230.0	-3.7
18	1110 1110	241.250	243.6	-0.1	0.7	17.3	245.9	-2.4
19	1110 1101	256.875	264.0	-0.8	-0.7	20.4	261.9	2.0
20	1110 1100	272.500	280.0	-0.1	-0.7	16.0	277.9	2.1
21	1110 1011	288.125	292.9	0.7	0.7	13.0	293.9	-0.9
22	1110 1010	303.750	312.4	0.6	0.7	19.4	309.9	2.5
23	1110 1001	319.375	330.4	-0.7	-0.0	18.0	325.8	4.6
24	1110 1000	335.000	344.5	-0.7	-0.7	14.1	341.8	2.7
25	1110 0111	350.625	355.6	0.0	-0.7	11.0	357.8	-2.2

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HS-236 THMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 36

1981/12/01 00:05:37 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1-5-1-4-1-1-1 A/D THRESHOLD TEST (RAND= 5, SENSOR=4)

HAC
TFST
527

DEC 01 '81

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
26	1110 0110	366.250	374.3	0.7	0.8	18.7	373.8	0.5
27	1110 0101	381.875	392.7	-0.1	0.7	18.5	389.7	3.0
28	1110 0100	397.500	412.3	-0.8	-0.7	19.6	405.7	6.6
29	1110 0011	413.125	422.0	-0.8	-0.7	9.7	421.7	0.3
30	1110 0010	428.750	443.0	0.7	0.1	20.9	437.7	5.3
31	1110 0001	444.375	458.0	0.6	0.7	15.0	453.6	4.4
32	1110 0000	460.000	466.1	0.0	0.7	8.0	469.6	-3.5
33	1101 1111	475.625	482.6	-0.7	-0.8	16.5	485.6	-3.0
34	1101 1110	491.250	499.0	0.0	-0.7	16.4	501.6	-2.6
35	1101 1101	506.875	518.6	0.6	0.7	19.6	517.5	1.1
36	1101 1100	522.500	531.9	0.7	0.7	13.2	533.5	-1.6
37	1101 1011	538.125	549.1	-0.8	-0.0	17.2	549.5	-0.4
38	1101 1010	553.750	567.2	-0.8	-0.7	18.1	565.5	1.8
39	1101 1001	569.375	586.1	-0.1	-0.7	18.9	581.4	4.7
40	1101 1000	585.000	597.8	0.6	0.6	11.6	597.4	0.4
41	1101 0111	600.625	610.1	0.0	0.7	12.3	613.4	-3.3
42	1101 0110	616.250	629.4	-0.7	-0.7	19.3	629.4	0.0
43	1101 0101	631.875	647.9	-0.8	-0.8	18.5	645.3	2.6
44	1101 0100	647.500	665.5	0.7	-0.0	17.6	661.3	4.2
45	1101 0011	663.125	676.3	0.7	0.7	10.8	677.3	-1.0
46	1101 0010	678.750	697.2	-0.0	0.7	20.9	693.3	3.9
47	1101 0001	694.375	713.6	-0.7	-0.7	16.4	709.3	4.4
48	1101 0000	710.000	728.9	0.0	-0.7	15.3	725.2	3.7
49	1100 1111	725.625	737.8	0.7	0.7	8.8	741.2	-3.4
50	1100 1110	741.250	754.3	0.7	0.6	16.5	757.2	-2.8
51	1100 1101	756.875	775.0	-0.9	-0.0	20.7	773.2	1.9

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HS-206 THERMALIC MATTER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 37

1981/12/01 08:05:37 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1.1.3.5-4 A/D THRESHOLD TEST (HAND= 5, SENSOR=4)

HAC
TEST
527

DEC 01 '81

THRESHOLD NUMBER	A/D THRESHOLD	OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV) LEVELS RATIO= 1:1 NOMINAL LOWER UPPER	INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE POINT DEVIATION
52	1100	1100	772.500	790.8 -0.8 -0.8	15.8	789.1 1.7
53	1100	1011	788.125	804.6 -0.0 -0.7	13.7	805.1 -0.5
54	1100	1010	803.750	822.7 0.8 0.8	18.1	821.1 1.6
55	1100	1001	819.375	840.6 -0.0 0.7	17.9	837.1 2.5
56	1100	1000	835.000	858.6 -0.6 -0.6	18.0	853.0 5.6
57	1100	0111	850.625	866.0 -0.7 -0.7	7.4	869.0 -3.0
58	1100	0110	866.250	883.9 0.7 -0.0	17.9	885.0 -1.1
59	1100	0101	881.875	901.8 0.6 0.7	17.9	901.0 0.9
60	1100	0100	897.500	921.2 -0.0 0.7	19.3	916.9 4.2
61	1100	0011	913.125	931.8 -0.8 -0.8	10.6	932.9 -1.1
62	1100	0010	928.750	952.8 0.0 -0.7	21.0	948.9 3.9
63	1100	0001	944.375	967.3 0.8 0.7	14.5	964.9 2.5
64	1100	0000	960.000	983.6 0.8 0.8	15.3	980.8 2.8
65	1011	1111	975.625	996.0 -0.7 -0.1	12.3	996.8 -0.9
66	1011	1110	991.250	1011.9 -0.7 -0.7	15.9	1012.8 -0.9
67	1011	1101	1006.88	1032.0 0.0 -0.7	20.1	1028.8 3.2
68	1011	1100	1022.50	1045.9 0.7 0.7	13.9	1044.7 1.1
69	1011	1011	1038.13	1061.1 0.7 0.7	15.2	1060.7 0.4
70	1011	1010	1053.75	1079.4 -0.8 -0.8	18.2	1076.7 2.7
71	1011	1001	1069.38	1098.4 -0.8 -0.8	19.0	1092.7 5.8
72	1011	1000	1085.00	1107.5 0.6 -0.0	9.0	1108.7 -1.2
73	1011	0111	1100.63	1122.5 0.7 0.7	15.0	1124.3 -2.1
74	1011	0110	1116.25	1140.5 0.1 0.7	18.0	1140.6 -0.1
75	1011	0101	1131.88	1159.7 -0.7 -0.8	18.7	1156.6 2.6
76	1011	0100	1147.50	1177.6 -0.8 -0.8	18.4	1172.6 5.1
77	1011	0011	1163.13	1188.2 0.8 0.7	10.6	1188.5 -0.3
78	1011	0010	1178.75	1209.0 0.7 0.6	20.7	1204.5 4.5

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 38
 1981/12/01 08:05:37 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 1.1.1.1.5-4 A/D THRESHOLD TEST (BAND= 5, SENSOR=4)

THRESHOLD A/D OUTPUT NUMBER THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
		LEVELS RATIO- NOMINAL	LOWER	UPPER		POINT	DEVIATION
79	1011 0001	1194.38	1225.3	-0.7	0.1	1220.5	4.8
80	1011 0000	1210.00	1237.0	-0.8	-0.7	1236.5	0.5
81	1010 1111	1225.63	1250.3	-0.0	-0.7	1252.4	-2.2
82	1010 1110	1241.25	1265.6	0.7	0.8	1268.4	-2.8
83	1010 1101	1256.88	1285.5	0.7	0.7	1284.4	1.1
84	1010 1100	1272.50	1301.2	-0.8	-0.8	1300.4	0.8
85	1010 1011	1288.13	1316.0	-0.7	-0.7	1316.3	-0.3
86	1010 1010	1303.75	1333.5	0.7	-0.1	1332.3	1.2
87	1010 1001	1319.38	1351.4	0.7	0.7	1348.3	3.1
88	1010 1000	1335.00	1365.5	0.0	0.8	1364.3	1.3
89	1010 0111	1350.63	1377.3	-0.7	-0.7	1380.2	-2.9
90	1010 0110	1366.25	1395.4	-0.8	-0.8	1396.2	-0.8
91	1010 0101	1381.88	1412.2	0.8	0.7	1412.2	0.1
92	1010 0100	1397.50	1430.4	0.8	0.8	1428.2	2.2
93	1010 0011	1413.13	1442.9	-0.8	0.0	1444.1	-1.2
94	1010 0010	1428.75	1463.5	-0.7	-0.6	1460.1	3.4
95	1010 0001	1444.38	1479.0	-0.0	-0.8	1476.1	3.2
96	1010 0000	1460.00	1492.0	0.7	0.8	1492.1	-0.1
97	1001 1111	1475.63	1505.1	-1.9	0.7	1508.1	-3.0
98	1001 1110	1491.25	1510.6	-0.8	-0.7	1524.0	-5.4
99	1001 1101	1506.88	1539.3	-0.7	-0.8	1540.0	-0.7
100	1001 1100	1522.50	1552.7	0.8	-0.0	1556.0	-3.3
101	1001 1011	1538.13	1568.2	0.7	0.7	1572.0	-3.8
102	1001 1010	1553.75	1585.3	0.1	0.8	1587.9	-2.7
103	1001 1001	1569.38	1604.8	-0.8	-0.8	1603.9	0.9
104	1001 1000	1585.00	1616.9	-0.8	-0.7	1619.9	-3.0

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 39

1981/12/01 08:05:37 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.4.3.5-B A/D THRESHOLD TEST (BAND= 5, SENSOR=4) DEC 01 '81

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TEST
S27

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
105	1001 0111	1600.63	1629.4	0.8	0.8	12.5	1635.9	-6.4
106	1001 0110	1616.25	1646.9	0.7	0.7	17.5	1651.8	-4.9
107	1001 0101	1631.88	1665.7	-0.8	0.0	18.7	1667.8	-2.1
108	1001 0100	1647.50	1680.7	-0.8	-0.8	15.0	1683.8	-3.1
109	1001 0011	1663.13	1695.9	-0.0	-0.8	15.2	1699.8	-3.8
110	1001 0010	1678.75	1715.2	0.8	0.8	19.3	1715.7	-0.5
111	1001 0001	1694.38	1731.4	0.8	0.8	16.1	1731.7	-0.4
112	1001 0000	1710.00	1750.3	-0.8	-0.8	18.9	1747.7	2.6
113	1000 1111	1725.63	1759.8	-0.8	-0.8	9.4	1763.7	-3.9
114	1000 1110	1741.25	1771.9	0.8	-0.1	12.1	1779.6	-7.8
115	1000 1101	1756.88	1792.4	0.8	0.8	20.5	1795.6	-3.2
116	1000 1100	1772.50	1806.8	-0.0	0.8	14.4	1811.6	-4.8
117	1000 1011	1788.13	1822.7	-0.8	-0.8	15.9	1827.6	-4.8
118	1000 1010	1803.75	1840.6	-0.8	-0.9	17.9	1843.5	-2.9
119	1000 1001	1819.38	1857.7	0.8	0.8	17.1	1859.5	-1.8
120	1000 1000	1835.00	1874.9	0.9	0.8	17.2	1875.5	-0.6
121	1000 0111	1850.63	1884.0	-0.8	-0.0	9.1	1891.5	-7.5
122	1000 0110	1866.25	1901.6	-0.8	-0.8	17.6	1907.5	-5.8
123	1000 0101	1881.88	1919.3	0.0	-0.8	17.7	1923.4	-4.1
124	1000 0100	1897.50	1937.0	0.8	0.8	17.7	1939.4	-2.4
125	1000 0011	1913.13	1948.7	0.9	0.8	11.7	1955.4	-6.7
126	1000 0010	1928.75	1976.1	-0.8	-0.8	21.4	1971.4	-1.3
127	1000 0001	1944.38	1985.7	-0.8	-0.8	15.6	1987.3	-1.6
128	1000 0000	1960.00	2008.6	0.8	-0.1	22.9	2003.3	5.3
129	0111 1111	1975.63	2017.0	0.8	0.8	8.3	2019.3	-2.3
130	0111 1110	1991.25	2034.1	-0.1	0.8	17.1	2035.3	-1.2

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 40

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3.1.1.3.5--8 A/D THRESHOLD TEST (BAND= 5, SENSOR=4)

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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
131	0111 1101	2006.88	2053.4	-0.8	-0.8	19.3	2051.2	2.1
132	0111 1100	2022.50	2070.9	-0.8	-0.7	17.5	2067.2	3.7
133	0111 1011	2038.13	2082.7	0.8	0.8	11.8	2083.2	-0.5
134	0111 1010	2053.75	2101.4	0.8	0.8	18.6	2099.2	2.2
135	0111 1001	2069.38	2122.7	-0.8	-0.8	21.4	2115.1	7.6
136	0111 1000	2085.00	2130.3	-0.9	-0.9	7.5	2131.1	-0.8
137	0111 0111	2100.63	2144.9	0.1	-0.8	14.6	2147.1	-2.2
138	0111 0110	2116.25	2163.3	0.8	0.9	18.4	2163.1	0.2
139	0111 0101	2131.88	2183.7	0.8	0.9	20.5	2179.0	4.7
140	0111 0100	2147.50	2203.0	-0.9	-0.8	19.2	2195.0	7.9
141	0111 0011	2163.13	2210.7	-0.8	-0.9	7.7	2211.0	-0.3
142	0111 0010	2178.75	2231.9	0.8	0.0	21.2	2227.0	4.9
143	0111 0001	2194.38	2249.4	0.8	0.8	17.5	2242.9	6.5
144	0111 0000	2210.00	2260.4	0.3	1.1	11.0	2258.9	1.5
145	0110 1111	2225.63	2272.1	-0.8	-0.8	11.7	2274.9	-2.8
146	0110 1110	2241.25	2289.2	-0.8	-0.9	17.1	2290.9	-1.6
147	0110 1101	2256.88	2306.5	0.9	0.9	17.3	2306.8	-0.3
148	0110 1100	2272.50	2324.2	0.8	0.8	17.6	2322.8	1.4
149	0110 1011	2288.13	2337.8	-0.9	-0.1	13.6	2338.8	-1.0
150	0110 1010	2303.75	2357.0	-0.9	-0.9	19.1	2354.8	2.2
151	0110 1001	2319.38	2377.1	-0.8	-0.9	20.1	2370.8	6.3
152	0110 1000	2335.00	2387.3	0.9	0.9	10.2	2386.7	0.6
153	0110 0111	2350.63	2398.3	0.9	0.9	11.0	2402.7	-4.4
154	0110 0110	2366.25	2410.4	-0.9	-0.9	20.1	2418.7	-0.2
155	0110 0101	2381.88	2438.6	-0.9	-0.9	20.1	2434.7	3.9
156	0110 0100	2397.50	2453.6	0.9	0.0	15.0	2450.6	2.9
157	0110 0011	2413.13	2463.9	0.9	0.8	10.3	2466.6	-2.7

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US-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 41

1981/12/01 08:05:37 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.5-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=4) (C 01 '81)

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV) LEVELS RATIO= 1 : 1			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
158	0110 0010	2428.75	2486.4	-0.0	0.9	22.5	2482.6	3.8
159	0110 0001	2444.38	2504.1	-0.8	-0.9	17.7	2498.6	5.5
160	0110 0000	2460.00	2512.3	-0.8	-0.8	8.3	2514.5	-2.2
161	0101 1111	2475.63	2524.4	0.9	0.9	12.0	2530.5	-6.1
162	0101 1110	2491.25	2541.1	0.7	0.7	16.7	2546.5	-5.4
163	0101 1101	2506.88	2560.3	-0.9	-0.0	19.1	2562.5	-2.2
164	0101 1100	2522.50	2578.8	-0.8	-0.9	18.5	2578.4	0.3
165	0101 1011	2538.13	2591.0	-0.0	-0.9	12.2	2594.4	-3.4
166	0101 1010	2553.75	2607.6	0.9	0.8	16.6	2610.4	-2.8
167	0101 1001	2569.38	2630.4	0.9	0.9	22.7	2626.4	4.0
168	0101 1000	2585.00	2640.5	-0.9	-0.9	10.1	2642.3	-1.8
169	0101 0111	2600.63	2652.4	-0.9	-0.9	11.9	2658.3	-5.9
170	0101 0110	2616.25	2670.0	0.9	0.0	17.6	2674.3	-4.3
171	0101 0101	2631.88	2686.7	0.9	0.9	16.6	2690.3	-3.6
172	0101 0100	2647.50	2703.4	0.0	0.8	16.7	2706.2	-2.8
173	0101 0011	2663.13	2718.1	-0.9	-0.9	14.7	2722.2	-4.1
174	0101 0010	2678.75	2739.3	-0.9	-0.9	21.2	2738.2	1.1
175	0101 0001	2694.38	2758.0	-1.1	0.9	18.7	2754.2	3.8
176	0101 0000	2710.00	2771.1	0.9	0.9	13.1	2770.2	1.0
177	0100 1111	2725.63	2779.7	-0.9	-0.1	8.5	2786.1	-6.4
178	0100 1110	2741.25	2796.1	-0.9	-0.8	16.4	2802.1	-6.0
179	0100 1101	2756.88	2814.4	-0.1	-0.9	18.3	2818.1	-3.7
180	0100 1100	2772.50	2831.1	1.0	0.9	16.7	2834.1	-2.9
181	0100 1011	2788.13	2844.5	0.9	0.9	13.3	2850.0	-5.6
182	0100 1010	2803.75	2863.4	-0.9	-1.0	18.9	2866.0	-2.6
183	0100 1001	2819.38	2880.9	-1.0	-1.0	17.5	2882.0	-1.1

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1981/12/01 00:05:37 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.5-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=4) (C01 31)

11AC
TEST
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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
184	0100 1000	2835.00	2898.1	0.9	-0.0	17.2	2898.0	0.1
185	0100 0111	2850.63	2905.9	0.9	0.9	7.8	2913.9	-8.0
186	0100 0110	2866.25	2924.6	-0.1	0.9	18.7	2929.9	-5.3
187	0100 0101	2881.87	2941.8	-1.0	-0.9	17.2	2945.9	-4.1
188	0100 0100	2897.50	2961.7	-1.0	-1.0	19.9	2961.9	-0.2
189	0100 0011	2913.13	2971.6	0.9	0.9	9.9	2977.8	-6.2
190	0100 0010	2928.75	2993.3	0.9	0.9	21.7	2993.8	-0.5
191	0100 0001	2944.33	3011.0	-1.0	2.4	17.7	3009.8	1.2
192	0100 0000	2960.00	3029.0	-0.9	-1.0	18.0	3025.8	3.2
193	0011 1111	2975.63	3037.2	-0.0	-0.9	8.2	3041.7	-4.5
194	0011 1110	2991.25	3052.8	1.0	1.0	15.5	3057.7	-5.0
195	0011 1101	3006.88	3071.4	0.9	0.9	18.6	3073.7	-2.3
196	0011 1100	3022.50	3089.7	-1.0	-1.0	18.3	3089.7	0.0
197	0011 1011	3038.13	3103.3	-1.0	-0.9	13.6	3105.6	-2.3
198	0011 1010	3053.75	3120.4	0.9	0.1	17.1	3121.6	-1.2
199	0011 1001	3069.38	3138.2	0.8	0.9	17.8	3137.6	0.6
200	0011 1000	3085.00	3148.3	-0.1	0.9	10.1	3153.6	-5.3
201	0011 0111	3100.63	3165.1	-0.9	-0.9	16.8	3169.6	-4.4
202	0011 0110	3116.25	3183.5	-0.9	-0.8	18.3	3185.5	-2.1
203	0011 0101	3131.88	3199.5	0.9	0.9	16.0	3201.5	-2.0
204	0011 0100	3147.50	3221.8	0.9	0.9	22.3	3217.5	4.3
205	0011 0011	3163.13	3231.3	-1.1	0.0	9.5	3233.5	-2.2
206	0011 0010	3178.75	3252.0	-1.0	-1.0	20.7	3249.4	2.6
207	0011 0001	3194.38	3267.6	-0.0	1.4	15.5	3265.4	2.2
208	0011 0000	3210.00	3282.1	-2.6	1.0	14.5	3281.4	0.7
209	0010 1111	3225.63	3295.5	-2.1	1.0	13.3	3297.4	-1.9

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 43
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3.5.3.5-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=4) 01 01

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LEVELS LOWER	RATIO= 1:1 UPPER		POINT	DEVIATION
210	0010 1110	3241.25	3310.3	-1.0	-1.0	14.9	3313.3	-3.0
211	0010 1101	3256.88	3328.4	-1.1	-1.0	18.0	3329.3	-0.9
212	0010 1100	3272.50	3344.3	0.9	-0.0	15.9	3345.3	-1.0
213	0010 1011	3288.13	3358.7	0.9	1.0	14.4	3361.3	-2.6
214	0010 1010	3303.75	3376.2	-0.0	1.0	17.5	3377.2	-1.0
215	0010 1001	3319.38	3395.4	-1.1	-1.0	19.2	3393.2	2.2
216	0010 1000	3335.00	3410.2	-1.0	-1.0	14.8	3409.2	1.0
217	0010 0111	3350.63	3420.8	0.9	1.0	10.6	3425.2	-4.3
218	0010 0110	3366.25	3439.3	1.0	1.0	18.5	3441.1	-1.8
219	0010 0101	3381.88	3456.9	-1.1	0.0	17.6	3457.1	-0.2
220	0010 0100	3397.50	3476.0	-1.1	-1.1	19.0	3473.1	2.9
221	0010 0011	3413.13	3488.1	-0.1	-1.0	12.1	3489.1	-1.0
222	0010 0010	3428.75	3508.4	0.9	1.1	20.2	3505.0	3.3
223	0010 0001	3444.38	3523.3	1.0	1.0	15.0	3521.0	2.3
224	0010 0000	3460.00	3535.9	-1.1	-1.0	12.5	3537.0	-1.1
225	0001 1111	3475.63	3552.5	-1.1	-1.0	16.6	3553.0	-0.5
226	0001 1110	3491.25	3564.4	1.0	0.0	11.8	3569.0	-4.6
227	0001 1101	3506.88	3583.5	0.9	1.0	19.1	3584.9	-1.4
228	0001 1100	3522.50	3601.9	-0.1	1.0	18.3	3600.9	1.0
229	0001 1011	3538.13	3616.2	-1.1	-1.0	14.4	3616.9	-0.7
230	0001 1010	3553.75	3633.6	-1.1	-0.9	17.3	3632.9	0.7
231	0001 1001	3569.38	3650.8	0.9	1.0	17.2	3648.8	2.0
232	0001 1000	3585.00	3664.2	0.9	1.0	13.4	3664.8	-0.6
233	0001 0111	3600.63	3678.6	-1.2	0.0	14.4	3680.8	-2.2
234	0001 0110	3616.25	3696.6	-1.1	-1.0	17.9	3696.8	-0.2
235	0001 0101	3631.88	3713.7	-0.1	-1.0	17.1	3712.7	0.9
236	0001 0100	3647.50	3735.3	-0.7	1.1	21.6	3728.7	6.6

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 44

1981/12/01 08:05:37 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1.5.1.5-F AND THRESHOLD TEST (HAND= 5, SENSOR=4)



DEC 01 '81

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
237	0001 0011	3663.13	3744.3	1.0	1.0	8.9	3744.7	-0.4
238	0001 0010	3678.75	3765.3	-1.1	-1.0	21.0	3760.7	4.6
239	0001 0001	3694.38	3781.4	-1.1	-1.0	16.1	3776.6	4.8
240	0001 0000	3710.00	3801.5	0.9	0.1	20.1	3792.6	8.9
241	0000 1111	3725.63	3809.9	-2.1	1.0	8.4	3819.6	1.3
242	0000 1110	3741.25	3823.3	-0.1	1.0	13.3	3811.6	-1.3
243	0000 1101	3756.88	3842.9	-1.2	-1.0	19.6	3840.5	2.4
244	0000 1100	3772.50	3859.8	-1.1	-1.1	16.9	3853.5	3.3
245	0000 1011	3788.13	3873.9	0.9	1.0	14.0	3872.5	1.4
246	0000 1010	3803.75	3890.5	0.9	1.1	16.6	3888.5	2.0
247	0000 1001	3819.38	3910.4	-1.1	0.0	19.9	3904.4	5.9
248	0000 1000	3835.00	3928.5	-1.2	-1.1	18.1	3920.4	8.1
249	0000 0111	3850.63	3937.5	-0.1	-1.0	9.0	3936.4	1.1
250	0000 0110	3866.25	3954.5	0.9	1.2	17.0	3952.4	2.1
251	0000 0101	3881.88	3971.5	0.9	1.0	17.0	3968.4	3.1
252	0000 0100	3897.50	3991.7	-1.3	-1.1	20.2	3984.3	7.4
253	0000 0011	3913.13	4004.4	-1.1	-1.0	12.6	4000.3	4.1
254	0000 0010	3928.75	4024.0	0.9	0.0	19.6	4016.3	7.7
255	0000 0001	3944.38	4039.5	0.9	1.1	15.5	4032.3	7.3

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HS-206 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 45

1981/12/01 08:12:01 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.1.5-H A/D THRESHOLD TEST (EAND= 5, SENSOR=5)
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CHECK 1) RMS ERROR, 2) THRESHOLD INCREMENT(+/- 0.0 := THRESH INC <= 31.2)
THE REMAINING DATA ARE FOR INFORMATION ONLY

BEST FIT STRAIGHT LINE IS: $Y = 15.903X - 40.0MV$

DEVIATION OF SLOPE FROM IDEAL IS: 1.781%

OFFSET IS: -40.0MV

COEFFICIENT OF DETERMINATION IS: $R^2 = .99999090$

ANALOG INPUT DURING DC RESTORE IS: 63.8MV

RMS ERROR = 3.477MV REQMT: RMS ERROR <= 7.812MV

THRESHOLD INCREMENT MEASUREMENT

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
24.6MV	277	15.958MV	5.7MV	221	3.889MV

LOWER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
1.3MV	252	-0.115MV	-4.1MV	220	1.010MV

UPPER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
5.5MV	252	0.047MV	-1.4MV	232	.751MV

TEST PASSED

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 46

1981/12/01 08:12:14 PENALTY TEST FULL PREFORMANCE @ AMBIENT TEMP.

3.5.3.5-B A/D THRESHOLD TEST (BAND= 5, SENSOR=5)

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THRESHOLD A/D OUTPUT NUMBER THRESHOLD	TOTAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
		LEVELS RATIO= 1 : 1	NOMINAL	LOWER		UPPER	POINT

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

1	1111 1111	-24.375	-30.0	0.3	1.1		-24.1	-5.9
2	1111 1110	-8.750	-12.4	-0.1	0.8	17.6	-8.2	-4.3
3	1111 1101	6.875	7.7	-1.1	-1.1	20.1	7.7	-0.1
4	1111 1100	22.500	23.1	-1.0	-0.9	15.4	23.6	-0.5
5	1111 1011	38.125	36.6	0.9	0.0	13.5	39.6	-2.9
6	1111 1010	53.750	56.2	0.8	0.9	19.6	55.5	0.8
7	1111 1001	69.375	74.3	-0.9	9.1	18.0	71.4	2.9
8	1111 1000	85.000	84.6	-1.0	-1.0	10.3	87.3	-2.6
9	1111 0111	100.625	99.4	-0.1	-1.0	14.7	103.2	-3.8
10	1111 0110	116.250	118.0	0.6	0.7	10.7	119.1	-1.0
11	1111 0101	131.875	135.3	1.0	1.0	17.2	135.0	0.3
12	1111 0100	147.500	155.0	-1.0	0.0	19.7	150.9	4.1
13	1111 0011	163.125	165.7	-0.9	-0.9	10.7	166.8	-1.1
14	1111 0010	178.750	186.8	0.6	0.0	21.1	182.7	4.1
15	1111 0001	194.375	201.5	0.9	0.9	14.7	198.6	2.9
16	1111 0000	210.000	214.0	-0.0	0.9	12.5	214.5	-0.5
17	1110 1111	225.625	227.2	-0.9	-0.9	13.2	230.4	-3.2
18	1110 1110	241.250	244.6	-0.6	-0.7	17.3	246.3	-1.7
19	1110 1101	256.875	262.7	0.9	0.0	18.1	262.2	0.5
20	1110 1100	272.500	279.6	0.8	0.9	16.9	278.1	1.5
21	1110 1011	288.125	293.5	-0.9	0.1	13.9	294.0	-0.5
22	1110 1010	303.750	313.4	-0.8	-0.8	19.9	309.9	3.5
23	1110 1001	319.375	330.3	-0.0	-0.8	16.8	325.8	4.5
24	1110 1000	335.000	343.5	0.9	1.0	13.3	341.7	1.8
25	1110 0111	350.625	354.3	0.9	1.0	10.8	357.6	-3.3

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FIT. S/N 3 PAGE 47
 1981/12/01 08:12:14 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 3-5-13-5-8 A/D THRESHOLD TEST (RAND= 5, SENSOR=5)



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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LEVELS LOWER	RATIO= 1:1 UPPER		POINT	DEVIATION
26	1110 0110	366.250	374.8	-0.7	0.0	20.5	373.5	1.3
27	1110 0101	381.875	392.2	-1.1	-1.0	17.4	389.4	2.8
28	1110 0100	397.500	411.2	0.9	1.7	19.0	405.3	5.9
29	1110 0011	413.125	420.6	0.9	0.9	9.3	421.2	-0.7
30	1110 0010	428.750	442.9	-0.1	0.7	22.3	437.1	5.8
31	1110 0001	444.375	458.2	-1.0	-0.9	15.3	453.0	5.1
32	1110 0000	460.000	466.2	-0.9	-0.8	8.0	468.9	-2.8
33	1101 1111	475.625	480.8	0.8	0.1	14.7	484.8	-4.0
34	1101 1110	491.250	497.7	0.5	0.7	16.8	500.7	-3.1
35	1101 1101	506.875	518.0	-1.0	-0.0	20.3	516.7	1.4
36	1101 1100	522.500	532.1	-0.8	-0.8	14.0	532.6	-0.5
37	1101 1011	538.125	547.9	0.0	-0.9	15.8	548.5	-0.5
38	1101 1010	553.750	565.9	0.8	0.9	18.0	564.4	1.5
39	1101 1001	569.375	583.7	0.8	1.0	17.8	580.3	3.4
40	1101 1000	585.000	596.8	-0.9	0.0	13.1	596.2	0.6
41	1101 0111	600.625	609.5	-1.0	-0.9	17.7	612.1	-2.5
42	1101 0110	616.250	627.5	0.7	0.0	17.9	628.0	-0.5
43	1101 0101	631.875	645.1	0.9	1.0	17.6	643.9	1.2
44	1101 0100	647.500	664.1	-0.0	0.9	19.0	659.8	4.3
45	1101 0011	663.125	675.4	-0.9	-0.9	11.3	675.7	-0.3
46	1101 0010	678.750	696.7	-0.7	-0.7	21.3	691.6	5.1
47	1101 0001	694.375	711.1	0.8	0.0	14.4	707.5	3.6
48	1101 0000	710.000	726.9	0.8	0.8	15.8	723.4	3.5
49	1100 1111	725.625	736.6	-0.9	0.0	9.7	739.3	-2.7
50	1100 1110	741.250	753.3	-0.7	-0.7	16.7	755.2	-1.9
51	1100 1101	756.875	772.4	0.0	-0.9	19.1	771.1	1.3

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HS-236 THRMATIC MAPPER MUX UNIT TEST MODEL.. F11. S/N 3 PAGE 48

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1981/12/01 08:12:14 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.3.5-43 A/D THRESHOLD TEST (BAND= 5, SENSOR=5)

0014

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
52	1100 1100	772.500	788.4	0.8	0.9	15.9	787.0	1.4
53	1100 1011	788.125	801.4	0.9	0.9	13.1	802.9	-1.5
54	1100 1010	803.750	821.5	-0.8	0.0	20.0	818.8	2.6
55	1100 1001	819.375	839.1	-1.2	-1.1	17.6	834.7	4.3
56	1100 1000	835.000	855.1	0.9	0.0	16.0	850.6	4.5
57	1100 0111	850.625	862.6	0.9	0.9	7.5	866.5	-3.9
58	1100 0110	866.250	881.7	0.0	0.6	19.0	882.4	-0.8
59	1100 0101	881.875	899.8	-0.9	-0.9	18.1	898.3	1.5
60	1100 0100	897.500	919.7	-0.9	-0.9	19.9	914.2	5.4
61	1100 0011	913.125	928.2	0.9	0.0	8.5	930.1	-2.0
62	1100 0010	928.750	949.7	0.7	0.7	21.5	946.0	3.6
63	1100 0001	944.375	965.3	-0.8	0.0	15.6	961.9	3.3
64	1100 0000	960.000	981.8	-0.9	-0.9	16.5	977.8	4.0
65	1011 1111	975.625	993.0	0.0	-0.9	11.1	993.8	-0.8
66	1011 1110	991.250	1008.5	0.7	0.5	15.5	1009.7	-1.2
67	1011 1101	1006.88	1027.9	0.9	0.9	19.4	1025.6	2.3
68	1011 1100	1022.50	1044.0	-0.9	0.0	16.1	1041.5	2.5
69	1011 1011	1038.13	1058.6	-0.9	-0.9	14.5	1057.4	1.2
70	1011 1010	1053.75	1075.6	0.8	-0.0	17.0	1073.3	2.3
71	1011 1001	1069.38	1094.6	0.9	0.9	19.0	1089.2	5.4
72	1011 1000	1085.00	1103.1	0.0	1.1	8.5	1105.1	-2.0
73	1011 0111	1100.63	1119.6	-0.9	-0.9	16.6	1121.0	-1.4
74	1011 0110	1116.25	1137.8	-0.7	-0.7	18.1	1136.9	0.9
75	1011 0101	1131.88	1155.0	1.0	0.0	17.2	1152.8	2.2
76	1011 0100	1147.50	1173.2	0.9	1.0	18.2	1168.7	4.5
77	1011 0011	1163.13	1185.1	-0.9	0.0	11.9	1184.6	0.5
78	1011 0010	1178.75	1206.0	-0.8	-0.8	20.9	1200.5	5.5

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 49

1981/12/01 08:12:14 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

4.5.3.5-B A/D THRESHOLD TEST (BAND= 5, SENSOR=5)

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LEVELS RATIO= 1:1 LOWER	UPPER		POINT	DEVIATION
79	1011 0001	1194.38	1221.3	-0.0	-1.0	15.3	1216.4	4.9
80	1011 0000	1210.00	1232.6	0.9	1.0	11.3	1232.3	0.3
81	1010 1111	1225.63	1245.1	0.9	1.0	12.5	1248.2	-3.1
82	1010 1110	1241.25	1262.3	-0.7	0.0	17.1	1264.1	-1.8
83	1010 1101	1256.88	1281.7	-0.9	-0.9	19.4	1280.0	1.7
84	1010 1100	1272.50	1296.5	0.9	0.0	14.7	1295.9	0.5
85	1010 1011	1288.13	1310.6	0.9	0.9	14.2	1311.8	-1.2
86	1010 1010	1303.75	1329.1	0.0	0.9	18.4	1327.7	1.4
87	1010 1001	1319.38	1348.3	-0.8	-0.8	19.2	1343.6	4.6
88	1010 1000	1335.00	1361.7	-0.9	-0.9	13.4	1359.5	2.2
89	1010 0111	1350.63	1371.7	0.9	0.0	10.0	1375.4	-3.8
90	1010 0110	1366.25	1390.1	0.8	0.8	18.4	1391.3	-1.2
91	1010 0101	1381.88	1408.7	-1.0	-0.0	18.6	1407.2	1.5
92	1010 0100	1397.50	1426.9	-0.9	-0.9	18.1	1423.1	3.8
93	1010 0011	1413.13	1437.9	-0.0	-1.0	11.0	1439.0	-1.1
94	1010 0010	1428.75	1458.3	0.9	0.9	20.4	1454.9	3.4
95	1010 0001	1444.38	1473.1	1.3	0.9	14.8	1470.9	2.3
96	1010 0000	1460.00	1487.7	-0.8	0.0	14.6	1486.8	1.0
97	1001 1111	1475.63	1497.8	-0.9	-1.0	10.1	1502.7	-4.8
98	1001 1110	1491.25	1512.6	0.7	-0.0	14.8	1518.6	-6.0
99	1001 1101	1506.88	1532.3	1.0	1.0	19.7	1534.5	-2.1
100	1001 1100	1522.50	1547.4	-2.2	1.0	15.0	1550.4	-3.0
101	1001 1011	1538.13	1563.3	-1.0	-0.9	15.9	1566.3	-3.0
102	1001 1010	1553.75	1580.3	-0.9	-0.8	17.0	1582.2	-1.9
103	1001 1001	1569.38	1599.0	0.9	-0.0	18.7	1598.1	0.9
104	1001 1000	1585.00	1609.6	1.0	1.0	10.6	1614.0	-4.4

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 50

1981/12/01 00:12:14 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

2.5.5.5-0 AND THRESHOLD TEST (BAND= 5, SENSOR=5) DEL 01 '81

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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDIAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV) LEVELS RATIO NOMINAL	LOWER	UPPER	INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE POINT	DEVIATION
105	1001 0111	1600.63	1624.3	-0.9	0.0	14.6	1629.9	-5.6
106	1001 0110	1616.25	1641.9	-0.9	-0.8	17.6	1645.8	-3.9
107	1001 0101	1631.88	1660.3	0.0	-1.0	18.3	1661.7	-1.4
108	1001 0100	1647.50	1677.7	-2.3	1.1	17.4	1677.6	0.1
109	1001 0011	1663.13	1688.7	1.0	1.0	11.0	1693.5	-4.8
110	1001 0010	1678.75	1709.9	-0.7	0.0	21.2	1709.4	0.5
111	1001 0001	1694.38	1726.4	-1.1	-0.9	16.5	1725.3	1.1
112	1001 0000	1710.00	1743.5	1.0	0.1	17.2	1741.2	2.3
113	1000 1111	1725.63	1752.1	-1.5	1.0	8.6	1757.1	-5.0
114	1000 1110	1741.25	1765.6	0.0	0.7	13.4	1773.0	-7.5
115	1000 1101	1756.88	1786.0	-0.9	-0.9	20.5	1788.9	-2.9
116	1000 1100	1772.50	1801.5	-1.0	-0.9	15.4	1804.8	-3.4
117	1000 1011	1788.13	1815.0	1.0	0.1	13.5	1820.7	-5.7
118	1000 1010	1803.75	1832.7	0.9	0.9	17.7	1836.6	-3.9
119	1000 1001	1819.38	1852.5	-0.9	0.0	19.8	1852.5	-0.1
120	1000 1000	1835.00	1869.1	-1.0	-1.0	16.6	1868.4	0.7
121	1000 0111	1850.63	1877.0	-0.1	-1.0	7.9	1884.3	-7.3
122	1000 0110	1866.25	1893.8	0.8	0.8	16.8	1900.2	-6.5
123	1000 0101	1881.88	1911.8	1.0	1.0	18.1	1916.1	-4.3
124	1000 0100	1897.50	1930.9	-1.0	0.0	19.1	1932.0	-1.1
125	1000 0011	1913.13	1942.1	-1.0	-1.0	11.2	1945.0	-5.6
126	1000 0010	1928.75	1962.2	0.8	0.0	20.0	1963.9	-1.7
127	1000 0001	1944.38	1977.9	0.9	0.9	15.7	1979.8	-1.9
128	1000 0000	1960.00	2000.8	-0.1	1.1	22.9	1995.7	5.1
129	0111 1111	1975.63	2010.0	-1.0	-1.0	9.7	2011.6	-1.6
130	0111 1110	1991.25	2027.0	-0.4	-0	16.9	2027.5	-0.5

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HS-206 THINATIC MOFFER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 52

1981/12/01 00112114 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

0110-1111-B A/D THRESHOLD TEST (RAND)= 5, SENSOR=5) MC 01 81

THRESHOLD A/D OUTPUT	IDEAL	ANALOG INPUT VOLTAGE (MV)	INCREASE	BEST FIT STRAIGHT LINE
NUMBER THRESHOLD	VALUE	LEVELS RATIO = 1 : 1	FROM PREV	POINT DEVIATION
	(MV)	NOMINAL LOWER UPPER	THRESHOLD	
158	0110 0010	2428.75 2477.5 -1.0 -1.0	22.5	2472.8 4.8
159	0110 0001	2444.38 2493.6 1.1 -0.4	16.0	2488.7 4.9
160	0110 0000	2460.00 2502.4 1.1 1.0	8.8	2504.6 -2.2
161	0101 1111	2475.63 2515.0 -1.0 0.0	12.7	2520.5 -5.4
162	0101 1110	2491.25 2531.7 -0.4 -0.4	16.6	2536.4 -4.7
163	0101 1101	2506.88 2551.3 -0.1 -1.1	19.6	2552.3 -1.0
164	0101 1100	2522.50 2568.1 1.1 1.1	16.8	2568.2 -0.1
165	0101 1011	2538.13 2579.5 1.1 1.1	11.4	2584.1 -4.6
166	0101 1010	2553.75 2599.5 -1.1 -0.1	20.0	2600.0 -0.5
167	0101 1001	2569.38 2616.7 -1.1 -1.1	17.2	2615.9 0.8
168	0101 1000	2585.00 2627.8 1.2 -0.0	11.1	2631.8 -4.0
169	0101 0111	2600.63 2640.6 1.1 1.2	12.8	2647.7 -7.1
170	0101 0110	2616.25 2659.3 0.1 1.0	18.6	2663.6 -4.3
171	0101 0101	2631.88 2677.2 -1.2 -1.1	17.9	2679.5 -2.3
172	0101 0100	2647.50 2699.6 -1.1 -1.1	22.4	2695.4 4.2
173	0101 0011	2663.13 2706.0 1.1 0.0	6.4	2711.3 -5.3
174	0101 0010	2678.75 2727.1 1.0 1.0	21.0	2727.2 -0.2
175	0101 0001	2694.38 2743.6 -1.0 0.0	16.5	2743.1 0.5
176	0101 0000	2710.00 2761.4 -1.1 -1.1	17.9	2759.0 2.4
177	0100 1111	2725.63 2768.3 0.0 -1.2	6.9	2774.9 -6.6
178	0100 1110	2741.25 2783.9 0.9 0.9	15.6	2790.8 -6.9
179	0100 1101	2756.88 2803.0 0.7 0.9	19.0	2806.7 -3.8
180	0100 1100	2772.50 2821.2 -1.1 0.0	18.2	2822.6 -1.4
181	0100 1011	2788.13 2833.7 -1.2 -1.1	17.5	2838.5 -4.8
182	0100 1010	2803.75 2851.9 1.0 -0.1	18.2	2854.4 -2.5
183	0100 1001	2819.38 2868.6 1.1 1.1	16.6	2870.3 -1.8

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HS-236 THEMATIC MAPPER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 53

1981/12/01 08:12:14 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.5-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=5)

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TEST
S27

000101

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LEVELS RATIO=	1:1 LOWER UPPER		POINT	DEVIATION
184	0100 1000	2885.00	2886.2	0.0	1.0	17.6	2886.2	-0.0
185	0100 0111	2890.63	2895.0	-1.2	-1.2	8.7	2902.2	-7.2
186	0100 0110	2866.25	2913.7	-1.0	-1.0	18.7	2918.1	-4.4
187	0100 0101	2881.88	2929.1	1.1	-0.0	15.4	2934.0	-4.9
188	0100 0100	2897.50	2949.6	1.1	1.1	20.5	2949.9	-0.3
189	0100 0011	2913.13	2960.3	-1.1	-0.0	10.7	2965.8	-5.5
190	0100 0010	2928.75	2982.0	-1.1	-0.9	21.7	2981.7	0.3
191	0100 0001	2944.38	2996.7	0.0	-1.0	14.7	2997.6	-0.9
192	0100 0000	2960.00	3016.1	-3.6	1.4	19.4	3013.5	2.6
193	0011 1111	2975.63	3023.5	1.1	1.2	7.4	3029.4	-5.9
194	0011 1110	2991.25	3041.7	-1.3	-0.0	18.2	3045.3	-3.6
195	0011 1101	3006.88	3060.3	-0.6	-1.1	18.6	3061.2	-0.9
196	0011 1100	3022.50	3076.5	1.2	0.0	16.2	3077.1	-0.6
197	0011 1011	3038.13	3089.3	1.2	1.2	12.8	3093.0	-3.7
198	0011 1010	3053.75	3107.9	-0.1	1.0	18.6	3108.9	-1.0
199	0011 1001	3069.38	3126.7	-1.2	-1.2	18.7	3124.8	1.9
200	0011 1000	3085.00	3136.4	-1.3	-1.1	9.7	3140.7	-4.3
201	0011 0111	3100.63	3150.9	1.1	0.0	14.4	3156.6	-5.7
202	0011 0110	3116.25	3169.5	0.9	1.1	18.6	3172.5	-3.0
203	0011 0101	3131.88	3187.6	-1.3	0.0	18.1	3188.4	-0.8
204	0011 0100	3147.50	3209.7	-1.2	-1.2	22.1	3204.3	5.4
205	0011 0011	3163.13	3217.9	0.0	-1.2	8.2	3220.2	-2.3
206	0011 0010	3178.75	3237.5	0.9	1.4	19.6	3236.1	1.4
207	0011 0001	3194.38	3253.3	1.1	1.1	15.8	3252.0	1.2
208	0011 0000	3210.00	3266.6	-1.3	-1.2	13.3	3267.9	-1.3
209	0010 1111	3225.63	3279.6	-1.2	-1.2	13.0	3283.8	-4.2

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HS-236 TH-MATIC MAPPER MUX UNIT TEST MODEL... FLT. S/N 3 PAGE 54
1981/12/01 08:12:14 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.
C...-H AND THRESHOLD TEST (BAND= 5, SENSOR=5)

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
210	0010 1110	3241.25	3295.6	1.1	0.0	16.0	3299.7	-4.1
211	0010 1101	3256.88	3313.8	1.1	1.2	18.1	3315.6	-1.9
212	0010 1100	3272.50	3330.6	-0.1	1.3	16.9	3331.5	-0.9
213	0010 1011	3288.13	3345.6	-1.2	-1.7	14.9	3347.4	-1.9
214	0010 1010	3303.75	3364.3	-1.2	-1.1	18.7	3363.3	0.9
215	0010 1001	3319.38	3380.5	1.1	1.1	16.3	3379.3	1.3
216	0010 1000	3335.00	3394.2	1.3	1.4	13.7	3395.2	-1.0
217	0010 0111	3350.63	3407.4	-1.2	0.0	13.1	3411.1	-3.7
218	0010 0110	3366.25	3426.0	-1.1	-1.1	18.6	3427.0	-1.0
219	0010 0101	3381.88	3442.8	-0.1	-1.3	16.8	3442.9	-0.0
220	0010 0100	3397.50	3466.5	-4.1	1.3	23.7	3458.8	7.8
221	0010 0011	3413.13	3472.2	1.1	1.2	5.7	3474.7	-2.5
222	0010 0010	3428.75	3494.5	-0.9	-0.9	22.3	3490.6	3.9
223	0010 0001	3444.38	3510.0	-1.3	-1.2	15.5	3506.5	3.5
224	0010 0000	3460.00	3520.3	1.3	0.0	10.4	3522.4	-2.0
225	0001 1111	3475.63	3535.9	-1.5	1.2	15.5	3538.3	-2.4
226	0001 1110	3491.25	3550.0	-0.6	0.8	14.1	3554.2	-4.2
227	0001 1101	3506.88	3574.6	-1.3	-1.1	24.6	3570.1	4.5
228	0001 1100	3522.50	3588.2	-1.3	-1.2	13.5	3586.0	2.2
229	0001 1011	3538.13	3599.5	1.1	1.2	11.4	3601.9	-2.4
230	0001 1010	3553.75	3617.5	1.1	1.2	17.9	3617.8	-0.3
231	0001 1001	3569.38	3636.9	-1.3	0.0	19.4	3633.7	3.1
232	0001 1000	3585.00	3648.7	-1.5	-1.4	11.8	3649.6	-0.9
233	0001 0111	3600.63	3662.8	-0.0	-1.3	14.1	3665.5	-2.7
234	0001 0110	3616.25	3679.7	0.9	1.1	16.9	3681.4	-1.7
235	0001 0101	3631.88	3697.0	1.2	1.2	17.2	3697.3	-0.3
236	0001 0100	3647.50	3720.6	-1.4	-1.3	23.7	3713.2	7.4

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1981/12/01 08:12:14 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.1.1-1 A/D THRESHOLD TEST (BAND= 5, SENSOR=5)

THRESHOLD A/D OUTPUT NUMBER THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
		NOMINAL	LOWER	UPPER		POINT	DEVIATION
237	0001 0011	3663.13	3729.1	-1.3	-1.2	8.5	3729.1 -0.0
238	0001 0010	3670.75	3747.8	1.1	0.1	10.7	3745.0 2.8
239	0001 0001	3694.38	3764.6	1.0	1.2	16.8	3760.9 3.6
240	0001 0000	3710.00	3785.4	-0.1	1.2	20.9	3776.8 8.6
241	0000 1111	3725.63	3794.2	-1.3	0.6	8.8	3792.7 1.5
242	0000 1110	3741.25	3807.4	-0.6	-0.6	13.1	3808.6 -1.3
243	0000 1101	3756.88	3830.4	1.0	1.2	23.1	3824.5 5.9
244	0000 1100	3772.50	3842.5	1.2	1.3	12.1	3840.4 2.1
245	0000 1011	3788.13	3857.9	-1.3	0.1	15.4	3856.4 1.6
246	0000 1010	3803.75	3876.1	-1.3	-1.2	18.2	3872.3 3.9
247	0000 1001	3819.38	3894.1	-0.1	-1.2	17.9	3888.2 5.9
248	0000 1000	3835.00	3912.6	-1.5	1.6	18.5	3904.1 8.6
249	0000 0111	3850.63	3919.0	1.2	1.2	6.4	3920.0 -0.9
250	0000 0110	3866.25	3938.3	-1.8	-0.9	19.3	3935.9 2.5
251	0000 0101	3881.88	3955.6	-1.4	-1.2	17.3	3951.8 3.8
252	0000 0100	3897.50	3974.1	1.3	5.5	18.5	3967.7 6.5
253	0000 0011	3913.13	3985.6	1.1	1.2	11.4	3983.6 2.0
254	0000 0010	3928.75	4006.4	-0.1	1.1	20.8	3999.5 6.9
255	0000 0001	3944.38	4023.5	-1.3	-1.1	17.1	4015.4 8.1

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 56
 1981/12/01 08:18:39 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 3-1-1-1-1-1 A/D THRESHOLD TEST (BAND= 5, SENSOR=6)
 S U M M A R Y

CHECK 1) RMS ERROR, 2) THRESHOLD INCREMENT (+/- 0.0 <= THRH INC <= 31.2)
 THE REMAINING DATA ARE FOR INFORMATION ONLY

BEST FIT STRAIGHT LINE IS: $Y = 15.878X - 40.9MV$

DEVIATION OF SLOPE FROM IDEAL IS: 1.617%
 OFFSET IS: -40.9MV
 COEFFICIENT OF DETERMINATION IS: $R^2 = .99999270$
 ANALOG INPUT DURING DC RESTORE IS: 63.8MV

RMS ERROR = 3.454MV REQMT: RMS ERROR <= 7.812MV

THRESHOLD INCREMENT MEASUREMENT

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
26.4MV	227	15.916MV	5.3MV	221	4.086MV

LOWER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
2.6MV	179	-0.296MV	-6.7MV	251	1.216MV

UPPER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
5.2MV	144	0.052MV	-2.5MV	163	.978MV

TEST PASSED

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 57

1981/12/01 08:10:52 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.5-4 A/D THRESHOLD TEST (BAND= 5, SENSOR=6)

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THRESHOLD A/D OUTPUT NUMBER THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV) LEVELS RATIO= 1 11 NOMINAL LOWER UPPER	INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE POINT DEVIATION	0101
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THE FOLLOWING DATA ARE FOR INFORMATION ONLY

1	1111 1111	-24.375	-29.6	-1.1	-0.7	-25.0	-4.6
2	1111 1110	-8.750	-14.0	0.8	-0.0	-9.1	-4.9
3	1111 1101	6.875	6.0	0.7	0.7	6.8	-0.8
4	1111 1100	22.500	20.2	-0.0	0.8	22.6	-2.4
5	1111 1011	38.125	36.8	-0.9	-0.8	38.5	-1.7
6	1111 1010	53.750	55.1	-0.9	-0.8	54.4	0.7
7	1111 1001	69.375	73.1	0.7	0.8	70.3	2.9
8	1111 1000	85.000	82.8	0.8	0.8	86.1	-3.3
9	1111 0111	100.625	98.5	-0.8	0.0	102.0	-3.5
10	1111 0110	116.250	117.0	-0.8	-0.7	117.9	-0.9
11	1111 0101	131.875	135.1	-0.1	-0.7	133.8	1.3
12	1111 0100	147.500	152.3	0.7	0.8	149.7	2.6
13	1111 0011	163.125	164.0	0.7	0.8	165.5	-1.5
14	1111 0010	178.750	185.8	-0.9	-0.8	181.4	4.4
15	1111 0001	194.375	201.8	-0.9	-0.8	197.3	4.5
16	1111 0000	210.000	212.4	0.8	-0.0	213.2	-0.8
17	1110 1111	225.625	225.4	0.8	0.8	229.0	-3.7
18	1110 1110	241.250	241.9	-0.1	0.8	244.9	-3.0
19	1110 1101	256.875	262.3	1.0	-0.3	260.8	1.5
20	1110 1100	272.500	278.1	-0.8	-0.7	276.7	1.4
21	1110 1011	288.125	291.7	0.6	0.7	292.6	-0.9
22	1110 1010	303.750	310.6	0.7	0.7	308.4	2.1
23	1110 1001	319.375	329.3	-0.8	0.0	324.3	5.0
24	1110 1000	335.000	342.2	-0.8	-0.8	340.2	2.0
25	1110 0111	350.625	353.8	-0.8	-0.7	356.1	-2.2

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HS-236 THEMATIC MAPPER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 58

1981/12/01 00:10:52 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.5-B A/D THRESHOLD TEST (BAND= 5, SENSOR=6



001

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
26	1110 0110	366.250	371.9	0.6	0.8	18.0	371.9	-0.1
27	1110 0101	381.875	389.7	0.7	0.8	17.8	387.8	1.9
28	1110 0100	397.500	409.9	-0.8	-0.8	20.2	403.7	6.2
29	1110 0011	413.125	420.0	-0.8	-0.8	10.1	419.6	0.4
30	1110 0010	428.750	440.4	0.7	0.0	20.4	435.5	4.9
31	1110 0001	444.375	456.2	0.6	0.6	15.8	451.3	4.9
32	1110 0000	460.000	462.6	-0.0	0.7	6.4	467.2	-4.6
33	1101 1111	475.625	480.2	-0.8	-0.8	17.6	483.1	-2.9
34	1101 1110	491.250	495.8	-0.7	-0.6	15.6	499.0	-3.2
35	1101 1101	506.875	517.3	0.6	0.7	21.6	514.8	2.5
36	1101 1100	522.500	528.4	0.8	0.8	11.1	530.7	-2.3
37	1101 1011	538.125	546.3	-0.7	-0.1	17.9	546.6	-0.3
38	1101 1010	553.750	563.6	-0.8	-0.8	17.3	562.5	1.2
39	1101 1001	569.375	582.9	-0.1	-0.7	19.3	578.4	4.6
40	1101 1000	585.000	594.2	0.7	0.7	11.3	594.2	-0.0
41	1101 0111	600.625	607.0	0.7	0.7	12.8	610.1	-3.1
42	1101 0110	616.250	625.5	-0.9	-0.8	18.5	626.0	-0.5
43	1101 0101	631.875	645.4	-0.8	-0.7	19.9	641.9	3.6
44	1101 0100	647.500	661.5	0.7	-0.0	16.0	657.7	3.7
45	1101 0011	663.125	672.8	0.7	0.7	11.3	673.6	-0.8
46	1101 0010	678.750	693.1	-0.0	0.7	20.3	689.5	3.6
47	1101 0001	694.375	710.1	-0.8	-0.7	17.0	705.4	4.7
48	1101 0000	710.000	725.2	-0.0	-0.7	15.1	721.3	4.0
49	1100 1111	725.625	735.5	0.6	0.6	10.3	737.1	-1.6
50	1100 1110	741.250	749.6	0.7	0.8	14.1	753.0	-3.4
51	1100 1101	756.875	771.9	-1.7	-0.0	22.3	768.9	3.0

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL., FLT. S/N 3 PAGE 59
 1981/12/01 08:18:52 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

14-54-34-1-1 A/D THRESHOLD TEST (BAND= 5, SENSOR=6)

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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LEVELS LOWER	RATIO= 1:1 UPPER		POINT	DEVIATION
52	1100 1100	772.500	786.0	-0.8	-0.7	14.0	784.8	1.2
53	1100 1011	788.125	800.3	-0.0	-0.7	14.3	800.6	-0.4
54	1100 1010	803.750	817.7	0.7	0.0	17.4	816.5	1.1
55	1100 1001	819.375	835.8	-0.0	0.7	18.1	832.4	3.4
56	1100 1000	835.000	853.3	-0.8	-0.8	17.5	848.3	5.0
57	1100 0111	850.625	861.4	-0.7	-0.7	8.1	864.2	-2.8
58	1100 0110	866.250	878.5	0.8	0.0	17.1	880.0	-1.6
59	1100 0101	881.875	898.0	0.7	0.7	19.5	895.9	2.1
60	1100 0100	897.500	915.5	-0.0	0.8	17.5	911.8	3.7
61	1100 0011	913.125	926.8	-0.7	-0.7	11.3	927.7	-0.9
62	1100 0010	928.750	947.2	-0.0	-0.7	20.4	943.5	3.7
63	1100 0001	944.375	962.3	0.7	0.7	15.1	959.4	2.9
64	1100 0000	960.000	977.2	0.8	0.9	14.9	975.3	1.9
65	1011 1111	975.625	992.3	-0.8	-0.0	15.0	991.2	1.1
66	1011 1110	991.250	1005.7	-0.7	-0.6	13.4	1007.1	-1.3
67	1011 1101	1006.88	1027.9	-0.0	-0.7	22.2	1022.9	5.0
68	1011 1100	1022.50	1039.5	0.7	0.7	11.5	1038.8	0.7
69	1011 1011	1038.13	1055.4	0.0	0.7	15.9	1054.7	0.7
70	1011 1010	1053.75	1073.2	-0.7	-0.7	17.8	1070.6	2.6
71	1011 1001	1069.38	1091.9	-0.8	-0.7	18.7	1086.4	5.4
72	1011 1000	1085.00	1100.5	0.8	0.0	8.7	1102.3	-1.8
73	1011 0111	1100.63	1116.4	0.7	0.7	15.8	1118.2	-1.8
74	1011 0110	1116.25	1133.6	0.0	0.8	17.2	1134.1	-0.5
75	1011 0101	1131.88	1154.5	-0.8	-0.7	20.9	1150.0	4.5
76	1011 0100	1147.50	1170.6	0.0	-0.7	16.1	1165.8	4.7
77	1011 0011	1163.13	1181.7	0.8	0.8	11.1	1181.7	0.0
78	1011 0010	1178.75	1201.6	0.7	0.8	19.9	1197.6	4.0

ORIGINAL PAGE IS
OF POOR QUALITY

HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLI. S/N 3 PAGE 60

1981/12/01 08:18:52 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1.5.4.5-4 AND THRESHOLD TEST (BAND= 5, SENSOR=6)

HAC
TEST
S27

DEC 01 '81

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDFAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
79	1011 0001	1194.38	1220.4	-2.0	-2.0	18.8	1213.5	7.0
80	1011 0000	1210.00	1233.0	-0.8	-0.8	12.5	1229.3	3.6
81	1010 1111	1225.63	1245.0	0.0	-0.8	12.0	1245.2	-0.2
82	1010 1110	1241.25	1257.8	0.8	0.8	12.8	1261.1	-3.3
83	1010 1101	1256.88	1279.8	-0.0	0.7	22.0	1277.0	2.8
84	1010 1100	1272.50	1293.3	-0.8	-0.8	13.4	1292.9	0.4
85	1010 1011	1288.13	1308.7	-0.8	-0.8	15.4	1308.7	-0.0
86	1010 1010	1303.75	1325.3	0.8	-0.0	16.5	1324.6	0.6
87	1010 1001	1319.38	1343.4	0.7	0.7	18.1	1340.5	2.9
88	1010 1000	1335.00	1356.8	-0.0	0.8	13.4	1356.4	0.4
89	1010 0111	1350.63	1371.7	-0.8	-0.8	14.9	1372.2	-0.6
90	1010 0110	1366.25	1386.9	-0.1	-0.8	15.2	1388.1	-1.2
91	1010 0101	1381.88	1406.1	-1.0	0.7	19.2	1404.0	2.1
92	1010 0100	1397.50	1421.6	0.8	0.9	15.5	1419.9	1.7
93	1010 0011	1413.13	1434.7	-0.7	0.0	13.1	1435.7	-1.0
94	1010 0010	1428.75	1455.1	-0.8	-0.7	20.4	1451.6	3.5
95	1010 0001	1444.38	1469.7	0.7	0.0	14.6	1467.5	2.2
96	1010 0000	1460.00	1481.7	0.9	0.9	11.9	1473.4	-1.7
97	1001 1111	1475.63	1495.5	-0.1	0.7	13.8	1499.3	-3.7
98	1001 1110	1491.25	1509.1	-0.8	-0.8	13.6	1515.1	-6.0
99	1001 1101	1506.88	1531.7	-0.7	-0.8	22.5	1531.0	0.6
100	1001 1100	1522.50	1543.0	-1.5	-0.2	11.3	1546.9	-3.9
101	1001 1011	1538.13	1559.1	0.7	0.8	16.2	1562.8	-3.6
102	1001 1010	1553.75	1576.3	-0.8	0.1	17.1	1578.6	-2.4
103	1001 1001	1569.38	1595.3	-0.6	-0.7	19.0	1594.5	0.7
104	1001 1000	1585.00	1607.0	0.1	-0.8	11.7	1610.4	-3.4

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OF POOR QUALITY

HS-236 THEMATIC MAPPER MUX UNIT TEST MOD1.. FLT. S/N 3 PAGE 61

1981/12/01 08:18:52 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

B.B.11.5-B A/D THRESHOLD TEST (BAND= 5, SENSOR=6)



ac 01 81

THRESHOLD A/D OUTPUT NUMBER	THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
105	1001 0111	1600.63	1622.1	-1.4	0.8	15.1	1626.3	-4.1
106	1001 0110	1616.25	1636.6	0.9	0.8	14.4	1642.2	-5.6
107	1001 0101	1631.88	1658.0	-0.8	-0.1	21.4	1658.0	-0.1
108	1001 0100	1647.50	1674.1	-0.8	-0.8	16.1	1673.9	0.2
109	1001 0011	1663.13	1685.2	0.7	-0.1	11.1	1689.8	-4.6
110	1001 0010	1678.75	1704.6	0.7	0.8	19.3	1705.7	-1.1
111	1001 0001	1694.38	1720.7	-0.0	0.7	16.1	1721.5	-0.8
112	1001 0000	1710.00	1740.1	-0.9	-0.8	19.4	1737.4	2.7
113	1000 1111	1725.63	1748.7	-0.8	-0.8	8.6	1753.3	-4.6
114	1000 1110	1741.25	1768.8	0.7	-0.0	12.1	1769.2	-8.4
115	1000 1101	1756.88	1783.2	0.7	0.7	22.4	1785.1	-1.9
116	1000 1100	1772.50	1796.4	-0.9	-0.0	13.1	1800.9	-4.6
117	1000 1011	1788.13	1812.1	-0.7	-0.7	15.7	1816.8	-4.8
118	1000 1010	1803.75	1829.1	0.1	-0.8	17.0	1832.7	-3.6
119	1000 1001	1819.38	1846.6	0.7	0.7	17.5	1848.6	-2.0
120	1000 1000	1835.00	1863.0	0.8	0.9	16.4	1864.4	-1.5
121	1000 0111	1850.63	1875.0	-0.8	-0.0	12.0	1880.3	-5.3
122	1000 0110	1866.25	1889.6	-0.9	-0.7	14.6	1896.2	-6.6
123	1000 0101	1881.88	1909.2	0.8	0.0	19.5	1912.1	-2.9
124	1000 0100	1897.50	1928.3	-2.7	0.8	19.2	1928.0	0.4
125	1000 0011	1913.13	1937.3	-0.1	0.7	8.9	1943.8	-6.6
126	1000 0010	1928.75	1957.7	-0.8	-0.9	20.4	1959.7	-2.0
127	1000 0001	1944.38	1973.4	-0.8	-0.8	15.6	1975.6	-2.2
128	1000 0000	1960.00	1995.9	0.9	-0.0	22.5	1991.5	4.4
129	0111 1111	1975.63	2006.9	-1.2	0.9	11.0	2007.3	-0.4
130	0111 1110	1991.25	2022.0	-0.8	0.0	15.1	2023.2	-1.2

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HS 236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 62

1981/12/01 00:18:52 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST: 5-11 AND THRESHOLD TEST (RAND= 5, SENSOR=6)

HAC
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S27

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	TIDAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
131	0111 1101	2006.88	2040.5	-0.3	2.9	18.5	2039.1	1.4
132	0111 1100	2022.50	2058.0	-0.0	-0.9	17.5	2055.0	3.0
133	0111 1011	2038.13	2070.3	0.8	0.8	12.3	2070.9	-0.5
134	0111 1010	2053.75	2088.0	0.9	0.8	17.7	2086.7	1.3
135	0111 1001	2069.38	2110.7	-0.8	-0.0	22.6	2102.6	8.1
136	0111 1000	2085.00	2116.6	-0.9	-0.9	5.9	2118.5	-1.9
137	0111 0111	2100.63	2131.4	0.8	0.0	14.8	2134.4	-3.0
138	0111 0110	2116.25	2149.6	0.9	1.0	18.2	2150.2	-0.6
139	0111 0101	2131.88	2170.1	-0.0	0.9	20.5	2166.1	4.0
140	0111 0100	2147.50	2189.2	-0.9	-0.9	19.1	2182.0	7.2
141	0111 0011	2163.13	2197.6	-0.9	-0.9	8.4	2197.9	-0.3
142	0111 0010	2178.75	2217.6	0.8	-0.0	20.0	2213.8	3.8
143	0111 0001	2194.38	2235.4	0.8	0.9	17.8	2229.6	5.8
144	0111 0000	2210.00	2242.2	-1.0	5.2	6.8	2245.5	-3.3
145	0110 1111	2225.63	2260.6	-0.9	-0.9	18.4	2261.4	-0.8
146	0110 1110	2241.25	2274.8	0.1	-0.9	14.1	2277.3	-2.5
147	0110 1101	2256.88	2295.9	-2.8	0.8	21.1	2293.1	2.7
148	0110 1100	2272.50	2309.3	0.9	0.9	13.5	2309.0	0.3
149	0110 1011	2288.13	2323.8	-1.0	-0.1	14.5	2324.9	-1.1
150	0110 1010	2303.75	2342.0	-1.0	-1.0	18.2	2340.8	1.3
151	0110 1001	2319.38	2362.3	0.8	0.0	20.2	2356.7	5.6
152	0110 1000	2335.00	2371.8	0.9	1.0	9.6	2372.5	-0.7
153	0110 0111	2350.63	2383.0	0.0	0.8	11.9	2388.4	-4.6
154	0110 0110	2366.25	2403.2	-0.9	-0.9	19.4	2404.3	-1.1
155	0110 0101	2381.88	2423.3	-0.9	-0.9	20.2	2420.2	3.2
156	0110 0100	2397.50	2437.9	1.0	1.0	14.6	2436.0	1.9
157	0110 0011	2413.13	2449.0	0.9	0.8	11.0	2451.9	-3.0

ORIGINAL PAGE 18
OF POOR QUALITY

HS-206 THMATIC MATTER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 63
 1981/12/01 08:18:52 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 0101101111 A/D THRESHOLD TEST (HAND= 5, SENSOR=6)

HAC
TEST
S27

0011

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
158	0110 0010	2420.75	2471.4	-0.9	0.1	22.4	2467.8	3.6
159	0110 0001	2444.38	2489.6	-1.0	-0.9	18.2	2403.7	5.9
160	0110 0000	2460.00	2496.9	0.0	-1.0	7.3	2499.6	-2.7
161	0101 1111	2475.63	2510.9	-0.5	1.0	14.0	2515.4	-4.5
162	0101 1110	2491.25	2525.0	1.0	1.0	14.1	2531.3	-6.3
163	0101 1101	2506.88	2549.7	-1.1	-2.5	24.7	2547.2	2.5
164	0101 1100	2522.50	2562.6	-1.0	-1.0	12.9	2563.1	-0.5
165	0101 1011	2538.13	2574.3	0.9	0.0	11.8	2578.9	-4.6
166	0101 1010	2553.75	2591.0	1.0	1.0	16.7	2594.8	-3.8
167	0101 1001	2569.38	2613.7	-0.1	0.9	22.7	2610.7	3.0
168	0101 1000	2585.00	2623.7	-1.0	-1.0	9.9	2626.6	-2.9
169	0101 0111	2600.63	2638.8	-1.0	-0.9	15.1	2642.5	-3.6
170	0101 0110	2616.25	2653.1	0.9	1.0	14.2	2658.3	-5.3
171	0101 0101	2631.88	2673.8	-3.1	0.9	20.8	2674.2	-0.4
172	0101 0100	2647.50	2693.2	-1.0	-0.1	19.3	2690.1	3.1
173	0101 0011	2663.13	2701.5	-0.9	-0.9	8.3	2706.0	-4.5
174	0101 0010	2678.75	2721.7	0.1	-0.8	20.2	2721.8	-0.2
175	0101 0001	2694.38	2740.2	0.9	0.9	19.5	2737.7	2.5
176	0101 0000	2710.00	2754.2	1.0	1.0	13.9	2753.6	0.6
177	0100 1111	2725.63	2764.6	-0.9	-1.0	10.4	2769.5	-4.9
178	0100 1110	2741.25	2778.4	-1.0	-0.9	13.8	2785.4	-7.0
179	0100 1101	2756.88	2799.7	2.6	1.6	21.3	2801.2	-1.6
180	0100 1100	2772.50	2813.1	1.0	1.0	13.4	2817.1	-4.0
181	0100 1011	2788.13	2827.0	-0.1	0.9	13.9	2833.0	-6.0
182	0100 1010	2803.75	2845.2	-1.0	-1.0	10.2	2848.9	-3.6
183	0100 1001	2819.38	2862.8	-0.8	-1.0	17.5	2864.7	-2.0

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OF POOR QUALITY

IRIS-236 THERMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 64

1901/12/01 08:18:52 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5+3.5-1.3 AND THRESHOLD TEST CRAND= 5, SENSOR=6

HAC
TEST
S27

000101

THRESHOLD NUMBER	A/D THRESHOLD	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
				NOMINAL	LOWER	UPPER		POINT	DEVIATION
184	0100	1000	2835.00	2879.5	1.1	1.1	16.7	2880.6	-1.2
185	0100	0111	2850.63	2890.6	-1.6	1.0	11.1	2896.5	-5.9
186	0100	0110	2866.25	2906.9	-1.1	0.1	16.3	2912.4	-5.5
187	0100	0101	2881.88	2927.4	-1.0	-1.0	20.5	2928.3	-0.9
188	0100	0100	2897.50	2943.0	-0.0	-1.0	15.6	2944.1	-1.2
189	0100	0011	2913.13	2953.3	1.0	1.0	10.4	2960.0	-6.7
190	0100	0010	2928.75	2974.9	1.0	1.1	20.7	2975.9	-1.0
191	0100	0001	2944.38	2993.9	-1.1	-1.0	19.8	2991.8	2.1
192	0100	0000	2960.00	3010.6	-1.3	-1.1	16.7	3007.6	3.0
193	0011	1111	2975.63	3019.5	1.0	-0.0	8.8	3023.5	-4.1
194	0011	1110	2991.25	3034.8	0.1	-0.6	15.3	3039.4	-4.6
195	0011	1101	3006.88	3058.2	-0.1	1.0	23.3	3055.3	2.9
196	0011	1100	3022.50	3070.1	-1.2	-1.2	11.9	3071.2	-1.1
197	0011	1011	3038.13	3084.2	-1.0	-1.0	14.1	3087.0	-2.8
198	0011	1010	3053.75	3100.4	0.9	1.1	16.2	3102.9	-2.5
199	0011	1001	3069.38	3118.1	0.9	1.0	17.7	3118.8	-0.7
200	0011	1000	3085.00	3128.9	-1.1	0.0	10.7	3134.7	-5.8
201	0011	0111	3100.63	3148.1	-1.1	-1.0	19.3	3150.5	-2.4
202	0011	0110	3116.25	3163.2	-0.0	-1.1	15.1	3166.4	-3.2
203	0011	0101	3131.88	3179.1	0.9	0.9	15.8	3182.3	-3.2
204	0011	0100	3147.50	3201.2	1.0	1.1	22.1	3198.2	3.0
205	0011	0011	3163.13	3211.3	-1.1	-1.0	10.1	3214.1	-2.7
206	0011	0010	3178.75	3231.0	-1.1	-1.0	19.7	3229.9	1.1
207	0011	0001	3194.38	3250.4	1.0	-0.0	19.4	3245.8	4.6
208	0011	0000	3210.00	3261.2	1.1	1.2	10.7	3261.7	-0.5
209	0010	1111	3225.63	3278.5	-4.7	0.1	17.4	3277.6	1.0

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US 216 DYNAMIC HALTER MIX UNIT TEST MODEL... FLT. S/N 3 PAGE 65

1981/12/01 08:18:52 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST... CHANNEL=5, SENSOR=6



0101

THRESHOLD NUMBER	AZD THRESHOLD	OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
				NOMINAL	LOWER	UPPER		POINT	DEVIATION
210	0010	1110	3291.25	3288.9	-1.1	-1.1	10.4	3293.4	4.5
211	0010	1101	3256.88	3313.7	-1.1	-1.1	24.6	3309.3	4.4
212	0010	1100	3272.50	3327.6	-3.8	1.2	13.9	3325.2	2.4
213	0010	1011	3288.13	3337.8	1.0	1.0	10.1	3341.1	-3.3
214	0010	1010	3303.75	3335.6	-1.3	-0.1	17.8	3357.0	-1.4
215	0010	1001	3319.38	3373.6	-1.2	-1.1	18.1	3372.8	0.8
216	0010	1000	3335.00	3387.8	0.0	-1.0	14.2	3388.7	-0.9
217	0010	0111	3350.63	3491.9	-1.5	1.1	14.1	3404.6	-2.7
218	0010	0110	3366.25	3417.1	1.1	1.1	15.1	3420.5	-3.4
219	0010	0101	3381.88	3434.8	-1.1	-1.1	17.8	3436.3	-1.5
220	0010	0100	3397.50	3460.0	-1.3	-1.2	25.2	3472.2	7.8
221	0010	0011	3413.13	3465.3	1.0	0.0	5.3	3468.1	-2.8
222	0010	0010	3428.75	3485.8	0.9	1.0	20.5	3484.0	1.9
223	0010	0001	3444.38	3505.5	-0.1	1.1	19.6	3499.9	5.6
224	0010	0000	3460.00	3513.5	-1.3	-1.3	8.1	3515.7	-2.2
225	0001	1111	3475.63	3532.1	-3.0	-1.0	18.6	3531.6	0.5
226	0001	1110	3491.25	3541.1	1.1	1.2	8.9	3547.5	-6.4
227	0001	1101	3506.88	3567.5	0.9	1.1	26.4	3563.4	4.1
228	0001	1100	3522.50	3579.6	-1.2	0.1	12.1	3579.2	0.4
229	0001	1011	3538.13	3593.6	-1.1	-1.1	13.9	3595.1	-1.6
230	0001	1010	3553.75	3610.1	-0.1	-1.2	16.6	3611.0	-0.9
231	0001	1001	3569.38	3627.1	1.0	1.2	16.9	3626.9	0.2
232	0001	1000	3585.00	3640.3	-0.1	1.2	13.3	3642.8	-2.4
233	0001	0111	3600.63	3658.0	-1.2	-1.1	17.6	3658.6	-0.7
234	0001	0110	3616.25	3677.6	-1.3	-1.1	14.7	3674.5	-1.9
235	0001	0101	3631.88	3695.5	5.7	0.0	22.8	3690.4	5.1
236	0001	0100	3647.50	3711.1	-5.7	1.2	15.7	3706.3	4.9

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OF POOR QUALITY

THRESHOLD NUMBER	A/D THRESHOLD	OUTPUT	TOTAL VOLTAGE (MV)	ANALOG INPUT VOLTAGE (MV)		INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE		
				LEVELS RATIO	U : I		POINT	DEVIATION	
			NOMINAL	LOWER	UPPER				
237	0001	0011	3663.13	3720.6	-0.0	1.1	9.4	3722.1	-1.5
238	0001	0010	3678.75	3740.7	-1.2	-1.1	20.1	3738.0	2.6
239	0001	0001	3694.38	3756.9	-0.1	-1.2	16.3	3753.9	3.0
240	0001	0000	3710.00	3777.4	1.0	1.2	20.5	3769.0	7.7
241	0000	1111	3725.63	3787.4	-1.6	1.1	10.0	3785.7	1.8
242	0000	1110	3741.25	3799.3	-1.2	-0.0	11.9	3801.5	-2.2
243	0000	1101	3756.88	3825.2	-1.2	-1.1	25.9	3817.4	7.7
244	0000	1100	3772.50	3840.3	-5.6	-1.2	15.2	3833.3	7.0
245	0000	1011	3788.13	3849.2	1.1	1.1	8.9	3849.2	0.0
246	0000	1010	3803.75	3865.1	-0.1	1.2	15.9	3865.0	0.1
247	0000	1001	3819.38	3885.0	-1.4	-1.2	19.9	3880.9	4.1
248	0000	1000	3835.00	3902.9	-1.3	-1.2	17.9	3896.0	6.1
249	0000	0111	3850.63	3913.9	1.6	0.0	11.0	3912.7	1.2
250	0000	0110	3866.25	3928.6	1.1	1.2	14.6	3928.6	0.0
251	0000	0101	3881.88	3952.4	-6.7	1.3	23.8	3944.4	7.9
252	0000	0100	3897.50	3965.8	-1.3	5.1	13.4	3960.3	5.5
253	0000	0011	3913.13	3978.9	-0.0	-1.1	13.1	3976.2	2.7
254	0000	0010	3928.75	3997.6	1.0	1.1	18.7	3992.1	5.6
255	0000	0001	3944.38	4013.0	1.1	1.2	15.4	4007.9	5.0

OF POOR QUALITY

115 236 THMATIC MATTER AUX UNIT TEST MODEL PAGE 67

1981/12/01 08:25:16 THMATIC TEST FULL PERFORMANCE @ AMBIENT TEMP.

THMATIC TEST FULL PERFORMANCE @ AMBIENT TEMP. SENSITIVITY=7

CHECK 1) RMS ERROR 2) THRESHOLD INCREMENT (+/- 0.0) = THRESH INC = 31.2

THRESHOLD INCREMENT = 31.2

DEVIATION OF SLOPE FROM IDEAL IS: 1.585%
 OFFSET IS: -40.2MV
 COEFFICIENT OF DETERMINATION IS: RXX2 = .99999180
 ANALOG INPUT DURING DC RESTORE IS: 63.8MV

THRESHOLD INCREMENT = 31.2 RMS ERROR <= 7.812MV

THRESHOLD INCREMENT = 31.2

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
28.2MV	227	15.923MV	4.9MV	200	4.409MV

THRESHOLD INCREMENT = 31.2

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
1.6MV	220	-0.238MV	-6.5MV	243	1.118MV

THRESHOLD INCREMENT = 31.2

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
4.1MV	172	0.095MV	-1.2MV	205	.957MV

TEST PASSED

ORIGINAL PAGE IS
OF POOR QUALITY

HS 236 THERMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 68

1981/12/01 08:25:30 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST CHANNEL=5, SENSOR=7

HAC
TEST
S27

THRESHOLD AND OUTPUT IDEAL ANALOG INPUT VOLTAGE (MV) INCREASE FROM PREV BEST FIT STRAIGHT LINE
NUMBER THRESHOLD VALUE LEVELS RATIO= 1:1 THRESHOLD POINT DEVIATION

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

1	1111 1111	-24.375	-29.8	0.4	0.1		-24.3	-5.4
2	1111 1110	-8.750	-13.8	0.7	0.9	15.9	-8.5	-5.4
3	1111 1101	6.875	7.4	-0.1	0.9	21.7	7.4	-0.0
4	1111 1100	22.500	20.2	-0.9	-0.8	12.8	23.3	-3.1
5	1111 1011	38.125	37.6	-0.0	-0.8	17.3	39.1	-1.6
6	1111 1010	53.750	54.8	0.8	0.8	17.2	55.0	-0.2
7	1111 1001	69.375	75.5	0.7	0.7	20.7	70.9	4.6
8	1111 1000	85.000	84.5	-0.9	-0.0	9.0	86.8	-2.2
9	1111 0111	100.625	99.3	-0.9	-0.9	14.8	102.6	-3.3
10	1111 0110	116.250	117.3	-0.1	-0.7	17.9	118.5	-1.3
11	1111 0101	131.875	136.4	0.7	0.8	19.1	134.4	2.0
12	1111 0100	147.500	151.9	-0.1	0.9	15.4	150.3	1.6
13	1111 0011	163.125	165.5	-0.8	-0.7	13.6	166.1	-0.7
14	1111 0010	178.750	185.8	-0.8	-0.8	20.3	182.0	3.8
15	1111 0001	194.375	201.4	0.7	-0.0	15.5	197.9	3.5
16	1111 0000	210.000	209.7	0.8	0.9	8.0	213.7	-4.0
17	1110 1111	225.625	226.1	-0.1	0.8	16.4	229.6	-3.5
18	1110 1110	241.250	242.9	-0.9	-0.9	16.8	245.5	-2.5
19	1110 1101	256.875	263.9	-0.1	-0.9	20.9	261.4	2.5
20	1110 1100	272.500	277.6	0.8	0.8	13.7	277.2	0.3
21	1110 1011	288.125	292.3	0.8	0.8	14.7	293.1	-0.8
22	1110 1010	303.750	311.5	-0.9	0.0	19.2	309.0	2.5
23	1110 1001	319.375	331.6	-0.9	-0.8	20.1	324.9	6.7
24	1110 1000	335.000	343.7	-0.1	-0.8	12.1	340.7	3.0
25	1110 0111	350.625	353.9	0.7	0.7	10.2	356.6	-2.7

ORIGINAL PAGE IS
OF POOR QUALITY

HS-236 THERMATIC MATTER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 69

1981/12/01 08:25:30 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST CHAND= 5, SENSOR=7

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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	DIGITAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
26	1110 0110	366.250	372.1	-0.1	0.8	18.2	372.5	-0.4
27	1110 0101	381.875	392.5	-0.9	-0.7	20.4	388.3	4.1
28	1110 0100	397.500	410.5	-0.8	-0.7	18.0	404.2	6.3
29	1110 0011	413.125	420.0	0.7	0.0	9.5	420.1	-0.1
30	1110 0010	428.750	440.6	0.6	0.7	20.6	436.0	4.6
31	1110 0001	444.375	456.7	-0.1	0.7	16.0	451.8	4.8
32	1110 0000	460.000	464.1	-1.0	-0.9	7.4	467.7	-3.6
33	1101 1111	475.625	481.0	-0.0	-0.8	16.9	483.6	-2.6
34	1101 1110	491.250	495.2	0.8	0.9	14.2	499.5	-4.3
35	1101 1101	506.875	517.0	0.8	0.7	21.8	515.3	1.7
36	1101 1100	522.500	529.5	-0.8	-0.0	12.5	531.2	-1.7
37	1101 1011	538.125	547.0	-0.8	-0.8	17.5	547.1	-0.1
38	1101 1010	553.750	563.6	0.7	0.0	16.6	562.9	0.7
39	1101 1001	569.375	584.3	0.7	0.6	20.6	578.8	5.5
40	1101 1000	585.000	594.9	0.0	0.8	10.6	594.7	0.2
41	1101 0111	600.625	608.4	-0.8	-0.8	13.5	610.6	-2.2
42	1101 0110	616.250	625.7	-0.8	-0.8	17.3	626.4	-0.8
43	1101 0101	631.875	645.1	0.7	0.0	19.4	642.3	2.7
44	1101 0100	647.500	660.3	0.9	0.8	15.3	658.2	2.1
45	1101 0011	663.125	674.3	-0.8	-0.0	13.9	674.1	0.2
46	1101 0010	678.750	693.9	-0.8	-0.8	19.6	689.9	3.9
47	1101 0001	694.375	710.9	0.1	-0.6	17.0	705.8	5.1
48	1101 0000	710.000	724.0	0.9	0.9	13.1	721.7	2.4
49	1100 1111	725.625	734.5	0.7	0.7	10.5	737.5	-3.0
50	1100 1110	741.250	750.4	-0.7	0.0	15.8	753.4	-3.0
51	1100 1101	756.875	771.8	-0.8	-0.0	21.4	769.3	2.5

ORIGINAL PAGE IS
OF POOR QUALITY

HS-206 THE MATIC MATTER BOX UNIT TEST MODEL.. FLT. S/N 3 PAGE 70

1981/12/01 08:25:30 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

THRESHOLD = 1100.0000 ANALOG INPUT VOLTAGE (MV) INCREASE FROM PREV THRESHOLD = 5.0 SENSOR = 7

THRESHOLD NUMBER	AND THRESHOLD	IDIAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
52	1100 1100	772.500	785.3	0.7	-0.0	13.5	785.2	0.1
53	1100 1011	788.125	800.2	0.7	0.8	14.9	801.0	-0.8
54	1100 1010	803.750	817.6	0.0	0.8	17.4	816.9	0.7
55	1100 1001	819.375	837.9	-1.0	-0.4	20.3	832.8	5.1
56	1100 1000	835.000	854.5	-0.8	-0.8	16.5	848.7	5.8
57	1100 0111	850.625	861.2	0.8	-0.0	6.8	864.5	-3.3
58	1100 0110	866.250	878.6	0.7	0.7	17.4	880.4	-1.8
59	1100 0101	881.875	892.2	-0.6	0.0	20.5	896.3	2.9
60	1100 0100	897.500	917.3	-0.8	-0.8	18.2	912.1	5.2
61	1100 0011	913.125	927.4	0.0	-0.7	10.1	928.0	-0.6
62	1100 0010	928.750	946.5	0.8	0.8	19.1	943.9	2.6
63	1100 0001	944.375	963.1	0.8	0.8	16.6	959.8	3.3
64	1100 0000	960.000	975.5	-0.9	4.1	12.4	975.6	-0.1
65	1011 1111	975.625	991.2	-0.8	-0.8	15.7	991.5	-0.3
66	1011 1110	991.250	1005.0	0.7	-0.1	13.8	1007.4	-2.3
67	1011 1101	1006.88	1028.0	0.9	0.8	22.9	1023.3	4.7
68	1011 1100	1022.50	1037.4	-0.0	0.8	9.4	1039.1	-1.7
69	1011 1011	1038.13	1056.7	-0.8	-0.8	19.3	1055.0	1.7
70	1011 1010	1053.75	1073.5	-0.8	-0.8	16.8	1070.9	2.7
71	1011 1001	1069.38	1094.3	0.8	-0.0	20.7	1086.7	7.5
72	1011 1000	1085.00	1101.2	0.8	0.9	6.9	1102.6	-1.4
73	1011 0111	1100.63	1117.8	-0.8	0.0	16.5	1118.5	-0.7
74	1011 0110	1116.25	1134.4	-0.7	-0.8	16.7	1134.4	0.1
75	1011 0101	1131.88	1155.4	0.0	0.8	21.0	1150.2	5.2
76	1011 0100	1147.50	1160.2	0.8	0.8	12.8	1166.1	2.1
77	1011 0011	1163.13	1182.3	0.8	0.8	14.1	1182.0	0.3
78	1011 0010	1178.75	1202.2	-0.8	0.0	19.9	1197.9	4.3

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TEST
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HS-236 THERMATIC MAPPER MUX UNIT TEST MODEL.. PLT. S/N 3 PAGE 71

1981/12/01 08:25:30 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

11.11.11.11 AND THRESHOLD TEST (RAND= 5, SENSOR=7)

HAC
TEST
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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
79	1011 0001	1194.38	1221.7	-0.8	-0.8	19.6	1213.7	8.0
80	1011 0000	1210.00	1228.4	0.8	0.0	6.6	1229.6	-1.2
81	1010 1111	1225.63	1245.3	-1.4	0.8	16.9	1245.5	-0.1
82	1010 1110	1241.25	1267.7	-0.0	0.9	12.4	1261.3	-3.6
83	1010 1101	1256.88	1281.2	-0.7	-0.8	23.4	1277.2	4.0
84	1010 1100	1272.50	1293.4	-0.9	-0.9	12.2	1293.1	0.3
85	1010 1011	1288.13	1308.4	0.9	-0.0	15.0	1309.0	-0.6
86	1010 1010	1303.75	1325.4	0.8	0.8	17.0	1324.8	0.6
87	1010 1001	1319.38	1345.0	-0.3	0.3	19.6	1340.7	4.3
88	1010 1000	1335.00	1358.9	-0.9	-0.8	13.9	1356.6	2.3
89	1010 0111	1350.63	1370.1	0.0	-0.8	11.1	1372.5	-2.4
90	1010 0110	1366.25	1386.1	0.9	0.8	16.0	1388.3	-2.2
91	1010 0101	1381.88	1406.7	-1.1	0.9	20.6	1404.2	2.5
92	1010 0100	1397.50	1423.3	-0.8	0.0	16.6	1420.1	3.3
93	1010 0011	1413.13	1435.3	-0.9	-0.8	12.0	1435.9	-0.6
94	1010 0010	1428.75	1453.9	0.8	0.0	18.6	1451.8	2.1
95	1010 0001	1444.38	1470.4	0.8	0.8	16.5	1467.7	2.7
96	1010 0000	1460.00	1480.0	0.0	0.9	9.6	1483.6	-3.5
97	1001 1111	1475.63	1497.3	-0.8	-0.8	17.3	1499.4	-2.1
98	1001 1110	1491.25	1509.0	-0.9	-0.8	11.6	1515.3	-6.4
99	1001 1101	1506.88	1531.5	0.8	-0.1	22.5	1531.2	0.3
100	1001 1100	1522.50	1540.7	0.9	0.9	9.2	1547.1	-6.3
101	1001 1011	1538.13	1560.4	-0.8	0.0	19.7	1562.9	-2.5
102	1001 1010	1553.75	1576.7	-0.9	-0.8	16.3	1578.8	-2.1
103	1001 1001	1569.38	1596.0	0.0	-0.8	19.2	1594.7	1.3
104	1001 1000	1585.00	1606.7	0.8	0.9	10.8	1610.5	-3.8

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HS-236 THOMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 72

1981/12/01 08:25:00 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TESTING IN A/D THRESHOLD TEST CHANNEL=5 SENSOR=7

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TEST
S27

THRESHOLD NUMBER	A/D THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
105	1001 0111	1600.63	1620.5	0.8	0.8	13.7	1626.4	-5.9
106	1001 0110	1616.25	1637.3	-0.8	0.0	16.9	1642.3	-4.9
107	1001 0101	1631.88	1658.6	-0.8	-0.9	21.3	1658.2	0.5
108	1001 0100	1647.50	1670.2	0.9	-0.0	11.6	1674.0	-3.8
109	1001 0011	1663.13	1685.7	0.9	0.9	15.5	1689.9	-4.2
110	1001 0010	1678.75	1704.2	-0.0	0.9	18.5	1705.8	-1.5
111	1001 0001	1694.38	1722.2	-0.8	-0.8	17.9	1721.7	0.5
112	1001 0000	1710.00	1739.8	-0.9	-1.0	17.7	1737.5	2.3
113	1000 1111	1725.63	1748.8	0.8	-0.1	9.0	1753.4	-4.6
114	1000 1110	1741.25	1760.6	0.8	0.9	11.8	1769.3	-8.6
115	1000 1101	1756.88	1784.6	-0.9	0.0	23.9	1785.1	-0.6
116	1000 1100	1772.50	1796.3	-0.9	-0.9	11.8	1801.0	-4.7
117	1000 1011	1788.13	1812.6	0.0	-0.8	16.3	1816.9	-4.3
118	1000 1010	1803.75	1828.5	0.9	0.9	15.9	1832.8	-4.2
119	1000 1001	1819.38	1847.1	0.9	0.9	18.5	1848.6	-1.6
120	1000 1000	1835.00	1865.3	-0.9	-0.1	18.3	1864.5	0.8
121	1000 0111	1850.63	1873.5	0.9	-0.9	8.1	1880.4	-6.9
122	1000 0110	1866.25	1888.8	0.9	0.1	15.3	1896.3	-7.5
123	1000 0101	1881.88	1909.7	-1.2	0.8	21.0	1912.1	-2.4
124	1000 0100	1897.50	1925.6	0.0	0.9	15.8	1928.0	-2.4
125	1000 0011	1913.13	1938.6	-0.9	0.9	13.0	1943.9	-5.3
126	1000 0010	1928.75	1957.3	-0.9	-0.8	18.7	1959.7	-2.5
127	1000 0001	1944.38	1973.2	0.8	-0.0	15.9	1975.6	-2.4
128	1000 0000	1960.00	1997.5	1.1	1.0	24.3	1991.5	6.0
129	0111 1111	1975.63	2006.2	-0.9	0.1	8.7	2007.4	-1.2
130	0111 1110	1991.25	2021.9	-0.9	-0.9	15.6	2023.2	-1.4

ORIGINAL PAGE 13
OF POOR QUALITY

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HS-236 THEMATIC MAPPER: MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 73

1981/12/01 08:25:30 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

11.5.5.5.5.5.5 AND THRESHOLD TEST (LAND= 5, SENSOR=7)

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TEST
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DEC 01

THRESHOLD AND OUTPUT NUMBER THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LTNE	
		NOMINAL	LOWER	UPPER		POINT	DEVIATION
131 0111 1101	2006.88	2045.2	0.0	-0.9	23.3	2039.1	6.1
132 0111 1100	2022.50	2058.1	0.9	1.0	12.9	2055.0	3.1
133 0111 1011	2038.13	2070.7	0.9	0.9	12.6	2070.9	-0.1
134 0111 1010	2053.75	2092.0	-3.3	-1.1	21.3	2086.7	5.3
135 0111 1001	2069.38	2111.6	-0.9	-0.9	19.5	2102.6	9.0
136 0111 1000	2085.00	2116.7	1.0	0.0	5.1	2118.5	-1.8
137 0111 0111	2100.63	2131.8	0.9	0.8	15.1	2134.3	-2.6
138 0111 0110	2116.25	2149.6	-0.0	0.9	17.8	2150.2	-0.7
139 0111 0101	2131.88	2171.9	-0.9	-0.9	22.3	2166.1	5.8
140 0111 0100	2147.50	2188.8	-1.0	-0.9	16.9	2182.0	6.8
141 0111 0011	2163.13	2197.1	0.9	0.9	8.3	2197.8	-0.8
142 0111 0010	2178.75	2217.2	0.9	0.9	20.2	2213.7	3.5
143 0111 0001	2194.38	2237.0	-0.9	0.0	19.7	2229.6	7.4
144 0111 0000	2210.00	2242.3	-1.0	-1.0	5.4	2245.5	-3.1
145 0110 1111	2225.63	2258.8	0.2	-0.0	16.4	2261.3	-2.6
146 0110 1110	2241.25	2273.7	0.9	1.1	14.9	2277.2	-3.5
147 0110 1101	2256.88	2296.7	-2.4	0.9	23.0	2293.1	3.6
148 0110 1100	2272.50	2310.1	-0.9	-1.0	13.5	2309.0	1.2
149 0110 1011	2288.13	2324.2	-1.1	-1.2	14.1	2324.8	-0.6
150 0110 1010	2303.75	2341.5	0.9	0.0	17.2	2340.7	0.8
151 0110 1001	2319.38	2363.1	1.0	1.0	21.6	2356.6	6.5
152 0110 1000	2335.00	2372.9	0.0	1.0	9.8	2372.4	0.4
153 0110 0111	2350.63	2385.0	-0.9	-0.9	12.2	2388.3	-3.3
154 0110 0110	2366.25	2403.1	-0.9	-0.9	18.0	2404.2	-1.1
155 0110 0101	2381.88	2423.2	1.0	1.1	20.1	2420.1	3.2
156 0110 0100	2397.50	2438.6	1.0	1.0	15.4	2435.9	2.6
157 0110 0011	2413.13	2450.2	-0.9	-0.0	11.6	2451.8	-1.6

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OF POOR QUALITY

HS 236 THERMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 74

1981/12/01 08:25:30 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST CHANNELS 1-16 AND THRESHOLD TEST CHANNELS 5, SENSOR=7

HAC
TEST
S27

DC 01 81

THRESHOLD AND OUTPUT NUMBER THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV) NOMINAL	LEVELS RATIO= 1:1		INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			LOWER	UPPER		POINT	DEVIATION
158	0110 0010	2428.75	2470.7	-0.9	-0.9	20.5	2467.7 3.0
159	0110 0001	2444.38	2489.3	0.1	-0.9	18.6	2483.6 5.7
160	0110 0000	2460.00	2496.4	-3.6	1.1	7.1	2499.4 -3.1
161	0101 1111	2475.63	2511.8	-1.6	1.0	15.5	2515.3 -3.4
162	0101 1110	2491.25	2525.2	-1.0	-1.0	13.4	2531.2 -5.9
163	0101 1101	2506.88	2545.1	-1.0	2.9	19.8	2547.0 -2.0
164	0101 1100	2522.50	2557.8	1.0	3.2	12.7	2562.9 -5.1
165	0101 1011	2538.13	2574.7	0.9	0.9	16.9	2578.8 -4.1
166	0101 1010	2553.75	2591.8	0.0	1.0	17.2	2594.7 -2.8
167	0101 1001	2569.38	2615.6	-1.0	-1.0	23.7	2610.5 5.0
168	0101 1000	2585.00	2623.8	-1.0	-1.0	8.2	2626.4 -2.6
169	0101 0111	2600.63	2635.7	1.0	1.0	11.8	2642.3 -6.6
170	0101 0110	2616.25	2652.8	1.0	1.0	17.2	2658.2 -5.3
171	0101 0101	2631.88	2675.6	-0.9	0.0	22.8	2674.0 1.6
172	0101 0100	2647.50	2687.7	-1.0	4.1	12.1	2689.9 -2.2
173	0101 0011	2663.13	2701.9	-0.0	-1.0	14.1	2705.8 -3.9
174	0101 0010	2678.75	2720.5	1.0	1.0	18.6	2721.6 -1.1
175	0101 0001	2694.38	2741.1	0.9	1.0	20.6	2737.5 3.6
176	0101 0000	2710.00	2754.4	-1.1	-1.1	13.3	2753.4 1.0
177	0100 1111	2725.63	2767.1	-2.6	-0.9	17.7	2769.3 -2.2
178	0100 1110	2741.25	2777.0	1.1	-0.0	9.9	2785.1 -0.2
179	0100 1101	2756.88	2800.5	-3.0	1.0	23.5	2801.0 -0.5
180	0100 1100	2772.50	2812.8	0.0	1.1	12.3	2816.9 -4.1
181	0100 1011	2788.13	2828.2	-1.0	-1.0	15.4	2832.8 -4.5
182	0100 1010	2803.75	2846.1	-1.0	-1.0	17.8	2848.6 -2.6
183	0100 1001	2819.38	2867.0	0.9	1.0	20.9	2864.5 2.5

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OF POOR QUALITY

HS-276 TH-EMATIC MATTER BOX UNIT TEST MODEL.. FLT. S/N 3 PAGE 75

1981/12/01 00:25:30 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST CHANNEL= 5, SENSOR=7

HAC
TEST
S27

000181

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
184	0100 1000	2835.00	2879.9	1.2	1.2	12.9	2880.4	-0.4
185	0100 0111	2850.63	2889.3	-1.1	0.0	9.4	2896.2	-6.9
186	0100 0110	2866.25	2906.7	-1.1	-1.1	17.4	2912.1	-5.4
187	0100 0101	2881.88	2924.1	0.0	-1.0	17.4	2928.0	-3.9
188	0100 0100	2897.50	2942.5	1.1	1.1	18.3	2943.9	-1.4
189	0100 0011	2913.13	2953.6	-0.1	1.0	11.1	2959.7	-6.1
190	0100 0010	2928.75	2974.5	-1.0	-1.1	20.9	2975.6	-1.1
191	0100 0001	2944.38	2994.8	-1.1	-1.0	20.3	2991.5	3.4
192	0100 0000	2960.00	3009.9	1.2	0.0	15.0	3007.4	2.5
193	0011 1111	2975.63	3020.2	-1.5	1.0	10.3	3023.2	-3.0
194	0011 1110	2991.25	3034.8	-2.3	0.0	14.6	3039.1	-4.3
195	0011 1101	3006.88	3059.4	-1.1	-1.1	24.6	3055.0	4.4
196	0011 1100	3022.50	3070.7	0.0	-1.0	11.3	3070.8	-0.1
197	0011 1011	3038.13	3083.4	1.0	1.1	12.7	3086.7	-3.3
198	0011 1010	3053.75	3100.2	1.0	0.9	16.8	3102.6	-2.4
199	0011 1001	3069.38	3124.8	-1.1	0.0	24.5	3118.5	6.3
200	0011 1000	3085.00	3129.6	-0.7	0.7	4.9	3134.3	-4.7
201	0011 0111	3100.63	3145.8	-0.0	-1.0	16.2	3150.7	-4.4
202	0011 0110	3116.25	3162.2	0.0	0.8	16.3	3166.1	-3.9
203	0011 0101	3131.88	3179.9	-0.0	1.1	17.7	3182.0	-2.0
204	0011 0100	3147.50	3201.7	-1.1	-1.1	21.8	3197.8	3.9
205	0011 0011	3163.13	3211.6	-1.1	-1.2	9.9	3213.7	-2.1
206	0011 0010	3178.75	3230.6	1.0	0.1	19.0	3229.6	1.0
207	0011 0001	3194.38	3251.2	1.0	1.1	20.6	3245.4	5.8
208	0011 0000	3210.00	3256.7	-0.1	1.1	5.5	3261.3	-4.6
209	0010 1111	3225.63	3275.8	-1.1	-1.1	19.1	3277.2	-1.4

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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)		INCREASE FROM PREVIOUS THRESHOLD	BEST FIT STRAIGHT LINE		
			NOMINAL	LOWER		POINT	DEVIATION	
210	0010 1110	3241.25	3288.0	-0.0	-1.1	12.2	3293.1	-5.0
211	0010 1101	3256.88	3312.8	-4.8	1.1	24.8	3308.9	3.9
212	0010 1100	3272.50	3322.3	1.1	1.1	9.5	3324.8	-2.5
213	0010 1011	3288.13	3339.0	-1.1	0.0	16.6	3340.7	-1.7
214	0010 1010	3303.75	3356.4	-0.7	-0.7	17.4	3356.6	-0.1
215	0010 1001	3319.38	3374.4	-0.0	-1.1	18.0	3372.4	2.0
216	0010 1000	3335.00	3387.7	1.1	1.2	13.3	3388.3	-0.6
217	0010 0111	3350.63	3399.7	-0.0	1.1	11.9	3404.2	-4.5
218	0010 0110	3366.25	3417.9	-1.2	-1.1	18.3	3420.0	-2.1
219	0010 0101	3381.88	3435.6	-1.1	-1.1	17.6	3435.9	-0.3
220	0010 0100	3397.50	3452.3	1.6	0.0	16.7	3451.8	0.5
221	0010 0011	3413.13	3465.4	1.0	1.0	13.1	3467.7	-2.2
222	0010 0010	3428.75	3485.4	-0.1	1.1	19.9	3483.5	1.8
223	0010 0001	3444.38	3507.2	-1.1	-1.0	21.9	3499.4	7.8
224	0010 0000	3460.00	3513.5	0.0	-1.2	6.2	3515.3	-1.8
225	0001 1111	3475.63	3532.5	-2.6	1.1	19.0	3531.2	1.3
226	0001 1110	3491.25	3540.6	0.9	1.2	8.1	3547.0	-6.5
227	0001 1101	3506.88	3568.8	-1.2	0.0	28.2	3562.9	5.9
228	0001 1100	3522.50	3578.6	-1.2	0.3	9.8	3578.8	-0.1
229	0001 1011	3538.13	3593.7	-0.1	-1.1	15.0	3594.6	-1.0
230	0001 1010	3553.75	3609.4	1.1	1.1	15.8	3610.5	-1.1
231	0001 1001	3569.38	3627.8	-0.1	1.2	18.3	3626.4	1.4
232	0001 1000	3585.00	3641.4	-1.2	-1.2	13.6	3642.3	-0.9
233	0001 0111	3600.63	3655.7	-1.3	-1.1	14.3	3658.1	-2.5
234	0001 0110	3616.25	3671.1	1.1	-0.1	15.4	3674.0	-2.9
235	0001 0101	3631.88	3689.4	1.1	1.1	18.3	3689.9	-0.5
236	0001 0100	3647.50	3704.6	-0.1	1.1	15.2	3705.8	-1.2

OF POOR QUALITY


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34.7.34.7-15 0/0 THRESHOLD 0 IFIT (ORAND)= 5, SENSOR=7

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DEC 21 '81

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	LEVELS RATIO= 1 : 1 UPPER		POINT	DEVIATION
237	0001 0011	3663.13	3721.8	-1.2	-1.1	17.2	3721.6	0.2
238	0001 0010	3678.75	3741.2	-0.1	-1.0	19.4	3737.5	3.7
239	0001 0001	3694.38	3756.2	1.0	1.3	15.0	3753.4	2.9
240	0001 0000	3710.00	3775.1	-4.6	2.7	10.8	3769.2	5.8
241	0000 1111	3725.63	3790.0	-1.2	0.1	15.0	3785.1	4.9
242	0000 1110	3741.25	3798.5	-1.2	-1.2	8.4	3801.0	-2.5
243	0000 1101	3756.88	3825.4	-6.5	-1.1	26.9	3816.9	8.5
244	0000 1100	3772.50	3833.2	1.1	1.1	7.8	3832.7	0.4
245	0000 1011	3788.13	3849.3	-0.2	1.1	16.1	3848.6	0.7
246	0000 1010	3803.75	3866.8	-1.2	-1.1	17.5	3864.5	2.3
247	0000 1001	3819.38	3885.7	-1.4	-1.1	18.8	3880.4	5.3
248	0000 1000	3835.00	3901.9	1.1	0.1	16.3	3896.2	5.7
249	0000 0111	3850.63	3916.2	-3.9	1.2	14.3	3912.1	4.1
250	0000 0110	3866.25	3928.1	-0.1	1.2	11.9	3928.0	0.1
251	0000 0101	3881.88	3947.5	-1.2	-1.2	19.4	3943.8	3.7
252	0000 0100	3897.50	3966.0	-0.1	-1.1	18.5	3959.7	6.3
253	0000 0011	3913.13	3977.9	1.0	1.1	11.9	3975.6	2.3
254	0000 0010	3928.75	3997.3	1.0	1.2	19.3	3991.5	5.8
255	0000 0001	3944.38	4014.6	-1.3	0.1	17.3	4007.3	7.3

ORIGINAL PAGE IS
OF POOR QUALITY

2-1 4 8 12-16 17-21 22-26 27-31 32

DEC 01 '81

[illegible]

ANALOG INPUT DURING DC RESTORE IS: 63.8MV

RECALL = 1.6411MU REFORMAT RMS ERROR <=7.812MU

[illegible]

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
24.41MV	128	15.949MV	4.4MV	241	4.145MV

|| 1000-12 || INPUT AND OUTPUT LEVELS RATIO = 1 : 1

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
1.7MV	246	-0.123MV	-6.3MV	236	.958MV

[Illegible handwritten notes]

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
2.6MV	95	-0.008MV	2.0MV	239	.759MV

LIST OF REFERENCES

ORIGINAL PAGE IS
OF POOR QUALITY

11A6.
1 27
521

DEC 01 '83

DEC 01 '83

ORIGINAL P - 13
OF POOR QUALITY

1	1111	1111	-24.375	-33.4	-1.7	-0.5		-27.5	-5.9
2	1111	1110	8.750	-15.7	0.7	-0.0	17.6	-11.6	-4.2
3	1111	1101	6.875	2.9	0.7	0.7	10.6	4.3	-1.4
4	1111	1100	22.500	10.3	-0.1	0.7	15.4	20.2	-1.9
5	1111	1011	36.125	33.5	-0.8	-0.7	15.1	36.1	-2.6
6	1111	1010	53.750	53.9	-0.1	-0.7	20.4	52.0	1.9
7	1111	1001	69.375	69.6	0.6	0.7	15.6	67.9	1.6
8	1111	1000	85.000	81.3	0.7	0.7	11.7	83.8	-2.6
9	1111	0111	100.625	95.1	-0.7	-0.0	13.8	99.7	-4.6
10	1111	0110	116.250	115.5	-0.8	-0.7	20.3	115.6	-0.2
11	1111	0101	131.875	133.3	-0.0	-0.7	17.8	131.5	1.7
12	1111	0100	147.500	150.4	0.7	0.7	17.2	147.4	3.0
13	1111	0011	163.125	160.8	-0.0	0.7	10.4	163.3	-2.5
14	1111	0010	178.750	184.1	-0.8	-0.7	23.2	179.2	4.0
15	1111	0001	194.375	198.4	-0.7	-0.6	14.3	195.1	3.2
16	1111	0000	210.000	210.1	0.7	0.0	11.7	211.0	-1.0
17	1110	1111	225.625	222.3	0.6	0.6	12.2	226.9	-4.6
18	1110	1110	241.250	241.2	-0.7	0.0	18.9	242.8	-1.6
19	1110	1101	256.875	259.6	-0.7	-0.7	18.4	258.7	0.9
20	1110	1100	272.500	276.3	-0.1	-0.7	16.7	274.6	1.7
21	1110	1011	288.125	288.7	0.6	0.7	12.4	290.5	-1.8
22	1110	1010	303.750	309.1	0.7	0.6	20.3	306.4	2.7
23	1110	1001	319.375	326.3	-0.7	-0.1	17.2	322.3	4.0
24	1110	1000	335.000	341.2	-0.8	-0.7	14.8	338.2	2.9
25	1110	0111	350.625	350.5	0.6	-0.1	9.3	354.1	-3.7

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11-111 (GPND)= 5, SENSOR=8

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49	1100	1111	725.625	731.8	0.7	0.7	7.9	735.7	-3.9
50	1100	1110	741.250	749.2	0.6	0.7	12.4	751.6	-2.4
51	1100	1101	756.875	763.4	0.7	-0.0	12.2	762.5	0.9

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1981/12/01 08:32:07 14 NAUTY 11 ST FULL PERFORMANCE @ AMBIENT TEMP.

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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	DIGITAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE		
			NOMINAL	LOWER	UPPER		POINT	DEVIATION	
52	1100	1100	772.500	785.1	-0.7	-0.7	16.6	783.4	1.7
53	1100	1011	788.125	797.7	0.7	0.0	12.6	799.3	-1.6
54	1100	1010	803.250	812.4	0.6	0.6	19.7	815.2	2.2
55	1100	1001	819.375	834.2	0.0	0.6	16.7	831.1	3.1
56	1100	1000	835.000	853.2	-0.7	-0.7	19.0	847.0	6.2
57	1100	0111	850.625	859.5	-0.7	-0.7	6.3	862.9	-3.4
58	1100	0110	866.250	878.5	0.7	0.0	19.0	878.0	-0.3
59	1100	0101	881.875	895.2	0.7	0.7	16.6	894.7	0.5
60	1100	0100	897.500	916.0	-0.7	-0.1	20.8	910.6	5.4
61	1100	0011	913.125	925.1	-0.7	-0.7	9.1	926.5	-1.4
62	1100	0010	928.250	947.2	0.0	-0.7	22.0	942.4	4.8
63	1100	0001	944.375	960.6	0.6	0.6	13.4	958.3	2.3
64	1100	0000	960.000	977.5	0.8	0.8	16.8	974.2	3.3
65	1011	1111	975.625	989.0	-0.7	0.0	11.5	990.1	-1.1
66	1011	1110	991.250	1005.8	-0.7	-0.7	16.8	1006.0	-0.2
67	1011	1101	1006.88	1024.1	0.7	0.0	18.3	1021.9	2.2
68	1011	1100	1022.50	1039.1	0.7	0.7	15.0	1037.8	1.3
69	1011	1011	1038.13	1054.0	-0.0	0.8	14.0	1053.7	0.3
70	1011	1010	1053.75	1073.0	-0.7	-0.8	19.0	1069.6	3.4
71	1011	1001	1069.38	1090.8	-0.7	-0.1	17.8	1085.5	5.4
72	1011	1000	1085.00	1108.9	0.7	-0.0	10.1	1101.4	-0.4
73	1011	0111	1100.63	1115.0	0.7	0.8	14.1	1117.3	-2.3
74	1011	0110	1116.25	1134.7	-0.7	0.1	19.7	1133.2	1.6
75	1011	0101	1131.88	1151.9	-0.8	-0.8	17.2	1149.1	2.8
76	1011	0100	1147.50	1170.6	-0.0	-0.7	18.7	1165.0	5.6
77	1011	0011	1163.13	1180.5	0.7	0.6	9.9	1180.9	-0.3
78	1011	0010	1178.75	1201.8	0.6	0.7	21.3	1196.8	5.1

10.0.11.5-4 A/D REFRESHED RESI (CONV)=5, SENSOR=8

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0.0.0.1-11 A/D BREAKPOINT TEST (RAN)= 5, SENSOR=8 )

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129	0111 1111	1975.63	2005.0	0.8	0.8	6.7	2007.6	-2.6
130	0111 1110	1991.25	2023.8	-0.7	-0.0	18.8	2023.5	0.3

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1981/12/01 08:37:07 FINAL TY TEST FULL PERFORMANCE @ AMBIENT TEMP.

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HS-236 PNEUMATIC MAPPER BOX UNIT TEST MODEL.. FLT. S/N 3 PAGE 85

1981/12/01 08:32:07 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST CHANNEL=5, SENSOR=8

THRESHOLD NUMBER	A/D THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
158	0110 0010	2428.75	2473.4	-0.9	-0.0	23.6	2468.7	4.7
159	0110 0001	2444.38	2490.2	-0.9	-0.8	16.8	2484.6	5.6
160	0110 0000	2460.00	2499.0	-0.1	-1.1	8.8	2500.5	-1.5
161	0101 1111	2475.63	2509.8	0.8	0.8	10.8	2516.4	-6.5
162	0101 1110	2491.25	2527.4	0.8	0.8	17.5	2532.3	-4.9
163	0101 1101	2506.88	2545.7	-0.9	0.0	18.3	2548.2	-2.5
164	0101 1100	2522.50	2564.3	-0.9	-0.9	18.7	2564.1	0.3
165	0101 1011	2538.13	2575.3	0.8	0.0	10.9	2580.0	-4.7
166	0101 1010	2557.75	2594.4	0.8	0.8	19.1	2595.9	-1.4
167	0101 1001	2569.38	2615.1	0.1	0.8	20.7	2611.8	3.4
168	0101 1000	2585.00	2626.2	-0.9	-1.0	11.1	2627.7	-1.4
169	0101 0111	2600.63	2637.3	-0.8	-0.9	11.0	2643.6	-6.3
170	0101 0110	2616.25	2655.9	0.7	0.8	18.6	2659.5	-3.6
171	0101 0101	2631.88	2675.7	0.8	0.8	19.8	2675.4	0.3
172	0101 0100	2647.50	2689.0	-0.9	-0.8	13.3	2691.3	-2.2
173	0101 0011	2663.13	2702.6	-0.9	-0.8	13.6	2707.2	-4.5
174	0101 0010	2678.75	2724.2	-0.1	-0.9	21.5	2723.1	1.1
175	0101 0001	2694.38	2741.5	0.9	0.9	17.3	2739.0	2.5
176	0101 0000	2710.00	2756.0	0.9	0.9	14.6	2754.9	1.2
177	0100 1111	2725.63	2763.7	-0.9	-0.8	7.7	2770.8	-7.0
178	0100 1110	2741.25	2781.4	-0.9	-0.9	17.7	2786.7	-5.2
179	0100 1101	2756.88	2797.5	1.0	0.1	16.1	2802.6	-5.0
180	0100 1100	2772.50	2815.4	0.8	0.8	17.9	2818.5	-3.0
181	0100 1011	2788.13	2828.4	-0.1	0.8	13.0	2834.4	-6.0
182	0100 1010	2803.75	2848.9	-0.9	-1.2	20.5	2850.3	-1.4
183	0100 1001	2819.38	2868.9	-0.9	-0.9	20.0	2866.2	2.7

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HS 236 THMATIC MAPPER MUX UNIT TEST MODEL.. M.T. S/N 3 PAGE 06

1981/12/01 08:32:07 PENALTY TEST FULL PRE-FORMANCE @ AMBIENT TEMP.

TEST NO. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

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527

Dec 01 '81

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
184	0100 1000	2835.00	2882.7	0.9	0.8	13.8	2882.1	0.6
185	0100 0111	2850.63	2889.5	0.8	0.8	6.9	2898.0	-8.4
186	0100 0110	2866.25	2910.0	-0.9	-0.1	20.4	2913.9	-3.9
187	0100 0101	2881.88	2925.8	-0.8	-1.1	15.8	2929.8	-3.9
188	0100 0100	2897.50	2945.3	0.0	-0.9	19.5	2945.7	-0.3
189	0100 0011	2913.13	2955.0	0.8	0.8	9.6	2961.5	-6.6
190	0100 0010	2928.75	2976.9	0.8	0.9	22.0	2977.4	-0.5
191	0100 0001	2944.38	2995.8	-0.9	-0.9	18.8	2993.3	2.4
192	0100 0000	2960.00	3013.6	-1.1	-1.1	17.8	3009.2	4.3
193	0011 1111	2975.63	3019.1	0.8	-0.1	5.5	3025.1	-6.0
194	0011 1110	2991.25	3036.3	0.9	1.0	17.1	3041.0	-4.8
195	0011 1101	3006.88	3053.8	-0.1	0.9	17.5	3056.9	-3.1
196	0011 1100	3022.50	3072.5	-0.9	-0.9	18.6	3072.8	-0.4
197	0011 1011	3038.13	3085.9	-0.9	-0.9	13.4	3088.7	-2.9
198	0011 1010	3053.75	3103.6	0.9	0.9	17.7	3104.6	-1.0
199	0011 1001	3069.38	3125.4	0.7	0.7	21.0	3120.5	4.9
200	0011 1000	3085.00	3132.3	-1.0	-0.0	6.9	3136.4	-4.2
201	0011 0111	3100.63	3147.3	-1.0	-0.9	15.1	3152.3	-5.0
202	0011 0110	3116.25	3166.7	-0.1	-0.9	19.3	3168.2	-1.6
203	0011 0101	3131.88	3186.3	0.8	0.9	19.6	3184.1	2.1
204	0011 0100	3147.50	3204.3	-6.0	1.0	18.0	3200.0	4.2
205	0011 0011	3163.13	3213.2	-1.0	-0.9	8.9	3215.9	-2.7
206	0011 0010	3178.75	3234.2	-1.0	-0.9	21.0	3231.8	2.3
207	0011 0001	3194.38	3252.9	0.9	-0.1	18.7	3247.7	5.1
208	0011 0000	3210.00	3260.4	1.0	1.0	7.5	3263.6	-3.2
209	0010 1111	3225.63	3273.9	-0.1	0.9	13.5	3279.5	-5.6

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HS-236 THERMATIC MAPPING MUX UNIT TEST MODEL.. FIT. S/N 3 PAGE 07

1981/12/01 08:32:07 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TESTING A/D THRESHOLD TEST (RANGE= 5, SENSOR=8)

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VOLTAGE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
210	0010 1110	3241.25	3292.5	-1.3	-1.4	18.6	3295.4	-2.9
211	0010 1101	3256.88	3309.4	-0.9	-0.9	16.9	3311.3	-2.0
212	0010 1100	3272.50	3325.0	0.8	0.9	16.5	3327.2	-1.4
213	0010 1011	3288.13	3340.1	0.9	0.8	14.2	3343.1	-3.1
214	0010 1010	3303.75	3360.1	-1.0	-0.0	20.0	3359.0	1.1
215	0010 1001	3319.38	3381.3	-1.0	-0.8	21.2	3374.9	6.4
216	0010 1000	3335.00	3391.7	-0.0	-1.0	10.4	3390.8	0.8
217	0010 0111	3350.63	3401.6	0.9	0.9	10.0	3406.7	-0.1
218	0010 0110	3366.25	3421.2	0.8	0.9	19.5	3422.6	-1.4
219	0010 0101	3381.88	3438.0	-1.4	-1.2	16.8	3438.5	-0.5
220	0010 0100	3397.50	3456.7	-1.0	-1.0	18.7	3454.4	2.3
221	0010 0011	3413.13	3467.7	0.9	0.1	11.0	3470.3	-2.6
222	0010 0010	3428.75	3489.4	0.8	0.9	21.7	3486.2	3.2
223	0010 0001	3444.38	3508.5	0.1	0.8	19.1	3502.1	6.4
224	0010 0000	3460.00	3516.6	-1.1	-1.1	8.1	3518.0	-1.4
225	0001 1111	3475.63	3529.6	1.1	-0.9	12.9	3533.9	-4.3
226	0001 1110	3491.25	3545.1	0.9	1.0	15.5	3549.8	-4.7
227	0001 1101	3506.88	3563.1	0.9	1.0	18.0	3565.7	-2.7
228	0001 1100	3522.50	3583.1	-1.1	-0.0	20.0	3581.6	1.5
229	0001 1011	3538.13	3596.1	-1.0	-1.1	12.9	3597.5	-1.5
230	0001 1010	3553.75	3613.7	0.2	-0.6	17.6	3613.4	0.3
231	0001 1001	3569.38	3630.6	0.9	1.0	16.8	3629.3	1.2
232	0001 1000	3585.00	3644.7	0.9	1.0	14.1	3645.2	-0.5
233	0001 0111	3600.63	3658.0	-1.1	-1.0	13.3	3661.1	-3.1
234	0001 0110	3616.25	3677.0	-1.1	-0.8	18.9	3677.0	-0.0
235	0001 0101	3631.88	3691.7	1.1	0.0	14.7	3692.9	-1.2
236	0001 0100	3647.50	3715.2	-6.3	1.1	23.5	3708.8	6.4

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US-236 THEMATIC MAPPER MUX UNIT TEST MODUL. FLT. S/N 3 PAGE 95

1981/12/01 08:38:44 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST RESULTS: 100% PASS

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REC 0

THRESHOLD NUMBER	AND THRESHOLD	OUTPUT	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
				NOMINAL	LOWER	UPPER		POINT	DEVIATION
131	0111	1101	2006.88	2037.5	-0.8	-0.0	20.5	2034.9	2.6
132	0111	1100	2022.50	2051.7	0.8	-0.7	14.2	2050.7	1.0
133	0111	1011	2038.13	2067.9	0.0	-0.6	16.7	2066.6	1.3
134	0111	1010	2053.75	2084.5	0.7	0.7	16.6	2082.4	2.1
135	0111	1001	2069.38	2107.8	0.8	0.7	23.3	2098.3	9.5
136	0111	1000	2085.00	2113.3	-0.7	-0.7	5.5	2114.2	-0.8
137	0111	0111	2100.63	2128.7	-0.8	-0.8	15.3	2130.0	-1.3
138	0111	0110	2116.25	2145.5	0.9	0.0	16.8	2145.9	-0.3
139	0111	0101	2131.88	2168.8	0.7	0.7	23.3	2161.7	7.1
140	0111	0100	2147.50	2185.3	0.0	0.8	16.4	2177.6	7.7
141	0111	0011	2163.13	2194.0	-0.7	-0.7	8.7	2193.4	0.6
142	0111	0010	2178.75	2214.1	-0.7	-0.7	20.1	2209.3	4.8
143	0111	0001	2194.38	2232.5	0.5	0.6	18.4	2225.1	7.4
144	0111	0000	2210.00	2238.5	0.7	0.7	6.0	2241.0	-2.5
145	0110	1111	2225.63	2254.7	-0.7	0.0	16.1	2256.8	-2.2
146	0110	1110	2241.25	2270.3	-0.7	-0.7	15.6	2272.7	-2.4
147	0110	1101	2256.88	2289.6	0.0	-0.8	19.3	2288.5	1.0
148	0110	1100	2272.50	2306.0	0.8	0.8	16.4	2304.4	1.6
149	0110	1011	2288.13	2319.3	0.8	0.8	13.3	2320.3	-1.0
150	0110	1010	2303.75	2337.9	-0.8	-0.7	18.6	2336.1	1.8
151	0110	1001	2319.38	2360.8	-0.8	-0.7	22.9	2352.0	8.9
152	0110	1000	2335.00	2370.2	0.7	0.0	9.4	2367.8	2.4
153	0110	0111	2350.63	2380.1	0.7	0.8	9.9	2383.7	-3.5
154	0110	0110	2366.25	2397.9	0.1	0.8	17.8	2399.5	-1.6
155	0110	0101	2381.88	2421.7	0.8	-0.8	23.7	2415.4	6.3
156	0110	0100	2397.50	2435.8	-0.8	-0.8	14.1	2431.2	4.6
157	0110	0011	2413.13	2445.4	0.8	0.7	9.6	2447.1	-1.7

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HS-236 THERMATIC MATHETIC MIX UNIT TEST MODEL .. TTT. S/N 3 PAGE 96

1981/12/01 00:38:44 PENALTY TEST FULL PERFORMANCE P ADJUTANT TEMP.

TEST NO. 1-1000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000

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DEC 01 '81

THRESHOLD NUMBER	A/D THRESHOLD	OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)		INCREASE FROM PREV THRESHOLD	TEST FULL STRAIGHT LINE	
				NOMINAL	LOWER		POINT	DEVIATION
158	0110	0010	2428.75	2465.9	0.8	1.0	2462.9	2.9
159	0110	0001	2444.38	2486.2	0.8	0.0	2478.8	7.4
160	0110	0000	2460.00	2494.3	-0.8	0.8	2494.6	-0.4
161	0101	1111	2475.63	2505.9	0.8	0.8	2510.5	-4.6
162	0101	1110	2491.25	2519.9	0.7	0.8	2526.3	-6.5
163	0101	1101	2506.88	2539.7	0.8	0.8	2542.2	-2.5
164	0101	1100	2522.50	2555.7	-0.8	-0.8	2558.1	-2.4
165	0101	1011	2538.13	2571.4	-0.8	-0.8	2573.9	-2.5
166	0101	1010	2553.75	2586.7	0.6	0.1	2589.8	-3.0
167	0101	1001	2569.38	2605.4	1.2	1.2	2605.6	0.2
168	0101	1000	2585.00	2618.4	-0.8	0.8	2621.5	-3.1
169	0101	0111	2600.63	2632.3	-0.8	-0.8	2637.3	-5.1
170	0101	0110	2616.25	2649.2	-0.9	-0.8	2653.2	-3.9
171	0101	0101	2631.88	2666.1	0.9	0.9	2669.0	-2.9
172	0101	0100	2647.50	2683.0	0.8	0.8	2684.9	-1.9
173	0101	0011	2663.13	2697.5	-0.8	0.0	2700.7	-3.2
174	0101	0010	2678.75	2716.8	-0.9	-0.9	2716.6	0.2
175	0101	0001	2694.38	2733.0	0.0	-0.9	2732.4	0.6
176	0101	0000	2710.00	2751.4	0.8	0.8	2748.3	3.1
177	0100	1111	2725.63	2757.4	0.8	0.8	2764.1	-6.7
178	0100	1110	2741.25	2773.1	-0.9	0.8	2780.0	-6.9
179	0100	1101	2756.88	2792.7	-0.9	0.8	2795.9	-3.1
180	0100	1100	2772.50	2809.2	0.9	0.0	2811.7	-2.5
181	0100	1011	2788.13	2822.9	0.3	0.9	2827.6	-4.7
182	0100	1010	2803.75	2840.2	0.8	0.9	2843.4	-3.3
183	0100	1001	2819.38	2858.7	1.0	0.9	2859.3	-0.6

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HS 236 THERMATIC MATTER MIX UNIT TEST MODEL 1, 111, S/N 3 PAGE 97

1981/12/01 08:38:44 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



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THRESHOLD NUMBER	A/D THRESHOLD	OUTPUT THRESHOLD	IDEAL VALUE (KV)	ANALOG INPUT VOLTAGE (KV)		INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
				NOMINAL	ERROR		POINT	DEVIATION
184	0100	1000	2835.00	2878.9	-0.9	-0.8	28.2	2875.1 3.8
185	0100	0111	2850.63	2883.8	0.8	0.8	4.9	2891.0 -7.2
186	0100	0110	2866.25	2900.9	0.9	1.0	17.1	2906.8 -6.0
187	0100	0101	2881.88	2919.2	-0.9	0.0	18.3	2922.7 -3.5
188	0100	0100	2897.50	2939.3	-0.9	-0.9	20.1	2938.5 0.7
189	0100	0011	2913.13	2950.0	0.0	0.9	10.7	2954.4 -4.4
190	0100	0010	2928.75	2969.0	0.8	0.9	19.0	2970.2 -1.2
191	0100	0001	2944.38	2984.5	-0.1	0.9	15.5	2986.1 -1.6
192	0100	0000	2960.00	3005.6	-0.9	0.9	21.1	3002.0 3.7
193	0011	1111	2975.63	3013.9	0.9	-0.9	8.3	3017.8 -3.9
194	0011	1110	2991.25	3027.5	0.8	0.0	13.6	3033.7 -6.1
195	0011	1101	3006.88	3047.7	0.9	0.9	20.1	3049.5 -1.8
196	0011	1100	3022.50	3061.2	-0.0	0.9	13.5	3065.4 -4.2
197	0011	1011	3038.13	3079.7	-0.9	-0.8	18.5	3081.2 1.5
198	0011	1010	3053.75	3094.9	-0.1	0.9	15.2	3097.1 -2.2
199	0011	1001	3069.38	3114.1	0.8	0.9	19.2	3112.9 1.2
200	0011	1000	3085.00	3123.6	1.0	1.0	9.5	3128.8 -5.1
201	0011	0111	3100.63	3141.0	-1.0	-0.0	17.3	3144.6 -3.7
202	0011	0110	3116.25	3157.8	-0.9	-0.8	16.8	3160.5 -2.7
203	0011	0101	3131.88	3175.8	0.0	0.9	18.0	3176.3 -0.6
204	0011	0100	3147.50	3196.9	-5.4	0.9	21.2	3192.2 4.8
205	0011	0011	3163.13	3205.8	-0.0	0.8	8.9	3208.0 -2.2
206	0011	0010	3178.75	3225.8	-1.0	-1.0	20.0	3223.9 1.9
207	0011	0001	3194.38	3242.4	-1.1	-1.0	16.6	3239.8 2.6
208	0011	0000	3210.00	3260.2	.9	0.0	17.8	3255.6 4.6
209	0010	1111	3225.63	3266.9	1.1	1.1	6.7	3271.5 -4.6

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15-236 THE MAGIC MATEK MIX UNIT TEST MODEL .. 111, 520 3 PAGE 99
 1981/12/01 08:38:44 FEEDBACK TEST FULL FREQUENCY RANGE @ AMBIENT TEMP.
 11.11.3.11-11 6/10 THRESHOLD TEST (FREQ) 57 SENSORS=9

THRESHOLD NUMBER	AZD THRESHOLD	AZD OUTPUT	IDEAL VOLTAGE (V)	ANALOG INPUT VOLTAGE (V)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
				NOMINAL	LOWER	UPPER		POINT	DEVIATION
237	0001	0011	3663.13	3715.5	0.8	1.0	15.7	3715.4	0.2
238	0001	0010	3678.25	3735.0	-1.1	-0.0	19.5	3731.2	3.8
239	0001	0001	3694.38	3752.0	-1.1	-1.2	17.0	3747.1	4.9
240	0001	0000	3710.00	3774.4	-3.2	-1.1	22.4	3762.9	11.5
241	0000	1111	3725.63	3777.3	1.0	1.0	2.9	3778.8	-1.5
242	0000	1110	3741.25	3791.2	0.1	1.5	14.0	3794.6	-3.4
243	0000	1101	3756.88	3812.9	-1.2	0.0	21.7	3810.5	2.5
244	0000	1100	3772.50	3829.4	-1.1	-1.0	16.5	3826.3	3.1
245	0000	1011	3788.13	3843.6	1.2	0.0	14.2	3842.2	1.4
246	0000	1010	3803.25	3859.9	1.1	1.0	16.3	3858.0	1.8
247	0000	1001	3819.38	3878.2	-0.2	1.1	19.0	3873.9	5.0
248	0000	1000	3835.00	3896.1	-0.9	-0.8	17.2	3889.7	6.3
249	0000	0111	3850.63	3906.8	-1.0	-1.0	10.7	3905.6	1.2
250	0000	0110	3866.25	3922.5	0.9	-0.1	15.7	3921.5	1.0
251	0000	0101	3881.88	3940.4	0.9	1.1	17.9	3937.3	3.1
252	0000	0100	3897.50	3960.5	-1.1	0.0	20.0	3953.2	2.3
253	0000	0011	3913.13	3973.4	-1.1	-1.1	12.9	3969.0	4.4
254	0000	0010	3928.25	3992.4	-0.2	-1.1	18.9	3984.9	2.5
255	0000	0001	3944.38	4007.8	1.0	1.1	15.5	4000.7	7.1

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HS-236 THERMATIC MASTER MIX UNIT TEST MODEL 1.1.1. S/N 3 PAGE 101
 1981/12/01 08:45:21 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 11251.3.1.1-8 A/D THRESHOLD 11-511 (FRONT) 11-511 SENSOR=101

THRESHOLD A/D OUTPUT NUMBER THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV) LEVELS RATIO= 1:11			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE POINT DEVIATION	
		NOMINAL	LOWER	HIGHER			

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

1	1111 1111	-24.375	-32.1	-0.3	0.5	-26.8	-5.3
2	1111 1110	-8.750	-15.2	-0.5	-0.5	-10.9	-4.7
3	1111 1101	6.875	5.0	-0.4	-0.4	4.9	0.1
4	1111 1100	22.500	17.5	0.3	-0.1	20.8	-3.2
5	1111 1011	38.125	34.3	0.3	0.4	36.6	-2.3
6	1111 1010	53.750	52.9	-0.5	-0.0	52.5	0.4
7	1111 1001	69.375	71.5	-0.4	-0.4	68.3	3.2
8	1111 1000	85.000	81.4	0.0	-0.4	84.2	-7.8
9	1111 0111	100.625	95.7	0.4	0.4	100.0	-4.3
10	1111 0110	116.250	114.4	0.5	0.4	115.9	-1.4
11	1111 0101	131.875	133.8	-0.5	-0.0	131.7	2.1
12	1111 0100	147.500	149.8	-0.5	-0.4	147.6	2.2
13	1111 0011	163.125	162.1	0.4	0.0	163.4	-1.4
14	1111 0010	178.750	183.0	0.4	0.4	179.3	3.7
15	1111 0001	194.375	198.8	-0.1	0.4	195.1	3.7
16	1111 0000	210.000	211.4	-0.5	-0.5	211.0	0.4
17	1110 1111	225.625	223.5	-0.4	-0.3	226.8	-3.3
18	1110 1110	241.250	239.8	0.3	0.0	242.7	-2.9
19	1110 1101	256.875	259.7	0.3	0.3	258.5	1.2
20	1110 1100	272.500	275.8	-0.5	-0.0	274.4	1.4
21	1110 1011	288.125	289.7	-0.4	-0.3	290.2	-0.5
22	1110 1010	303.750	308.7	-0.0	-0.4	306.1	2.6
23	1110 1001	319.375	326.2	0.2	0.3	321.9	4.2
24	1110 1000	335.000	342.7	0.4	0.4	337.8	4.9
25	1110 0111	350.625	351.2	-0.4	-0.4	353.6	-2.4

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HS-236 THEMATIC MAPPER MIX UNIT TEST MODEL 1, FLT. S/N 3 PAGE 102

1981/12/01 08:45:21 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST 1-4-5-6-7-8 AND THRESHOLD TEST COND= 57 SENSOR=10

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THRESHOLD NUMBER	AND THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PEN V THRESHOLD	BEST FIT STRAIGHT LINE	
			NOMINAL	LOWER	UPPER		POINT	DEVIATION
26	1110 0110	366.250	370.2	-0.4	-0.3	18.9	369.5	0.7
27	1110 0101	381.875	388.3	-0.3	-0.1	18.1	385.3	2.9
28	1110 0100	397.500	407.1	-0.2	-0.3	18.8	401.2	5.9
29	1110 0011	413.125	416.9	0.0	0.4	9.8	417.0	-0.1
30	1110 0010	428.750	438.7	-0.4	-0.4	21.8	432.9	5.8
31	1110 0001	444.375	454.1	-0.5	-0.4	15.4	448.7	5.4
32	1110 0000	460.000	462.7	0.4	0.5	8.6	464.6	-1.9
33	1101 1111	475.625	476.9	0.3	0.4	14.2	480.5	-3.5
34	1101 1110	491.250	493.1	-0.5	-0.0	16.1	496.3	-3.2
35	1101 1101	506.875	513.7	-0.5	-0.4	20.6	512.2	1.6
36	1101 1100	522.500	526.4	-0.0	-0.4	12.7	528.0	-1.6
37	1101 1011	538.125	543.1	0.3	0.3	16.7	543.9	-0.8
38	1101 1010	553.750	560.2	0.3	0.4	17.2	559.7	0.5
39	1101 1001	569.375	579.8	-0.1	-0.3	19.5	575.6	4.2
40	1101 1000	585.000	592.1	-0.4	-0.4	12.3	591.4	0.7
41	1101 0111	600.625	604.3	0.4	0.0	12.1	607.3	-3.0
42	1101 0110	616.250	622.3	0.3	0.3	18.0	623.1	-0.8
43	1101 0101	631.875	641.0	-0.0	0.3	18.6	639.0	2.0
44	1101 0100	647.500	657.7	-0.5	-0.4	16.7	654.8	2.9
45	1101 0011	663.125	670.5	-0.3	-0.3	12.8	670.7	-0.2
46	1101 0010	678.750	690.4	0.4	0.4	19.9	686.5	3.9
47	1101 0001	694.375	706.5	0.3	0.3	16.1	702.4	4.2
48	1101 0000	710.000	722.9	-0.5	-0.0	16.4	718.2	4.7
49	1100 1111	725.625	731.3	-0.4	-0.4	8.3	734.1	-2.8
50	1100 1110	741.250	747.3	-0.1	-0.5	16.0	749.9	-2.6
51	1100 1101	756.875	767.1	0.3	0.4	19.8	765.8	1.3

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HS-236 THERMATIC MAPPER MIX UNIT TEST MODEL 1.0 FLT. S/N 3 PAGE 104

1981/12/01 08:45:21 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

11.5.13.11-13 A/D THRESHOLD TEST CHANNELS 57 SENSITIVITY 10

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV) LEVELS RATIO - 1 : 1 NOMINAL LOWER UPPER	INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE POINT DEVIATION
79	1011 0001	1194.38	1214.2 0.4 0.4	15.9	1209.6 4.6
80	1011 0000	1210.00	1225.4 0.5 0.5	11.1	1225.5 -0.1
81	1010 1111	1225.63	1239.2 -0.3 -0.4	13.8	1241.3 -2.1
82	1010 1110	1241.25	1254.7 -0.5 -0.5	13.5	1257.2 -2.5
83	1010 1101	1256.88	1274.7 0.4 0.0	20.0	1273.0 1.7
84	1010 1100	1272.50	1288.8 0.4 0.4	14.1	1288.9 -0.0
85	1010 1011	1288.13	1304.2 0.0 0.4	15.3	1304.7 -0.5
86	1010 1010	1304.75	1321.3 -0.4 -0.4	17.1	1320.6 0.8
87	1010 1001	1319.38	1340.2 -0.4 -0.4	18.9	1336.4 3.8
88	1010 1000	1335.00	1357.2 0.4 0.4	17.0	1352.3 4.9
89	1010 0111	1350.63	1364.9 0.5 0.4	7.7	1368.1 -3.2
90	1010 0110	1366.25	1383.1 -0.5 -0.1	18.2	1384.0 -0.9
91	1010 0101	1381.88	1400.6 -0.5 -0.4	17.5	1399.8 0.8
92	1010 0100	1397.50	1418.4 0.0 -0.4	17.8	1415.7 2.7
93	1010 0011	1413.13	1430.2 0.3 0.4	11.8	1431.5 -1.3
94	1010 0010	1428.75	1450.5 0.0 0.4	20.2	1447.4 3.1
95	1010 0001	1444.38	1466.3 -0.4 -0.4	15.8	1463.2 3.0
96	1010 0000	1460.00	1480.1 -0.5 0.4	13.9	1479.1 1.1
97	1001 1111	1475.63	1489.7 0.5 0.0	9.6	1494.9 -3.2
98	1001 1110	1491.25	1504.4 0.4 0.4	14.7	1510.8 -6.4
99	1001 1101	1506.88	1525.6 0.0 0.5	21.2	1526.6 -1.1
100	1001 1100	1522.50	1537.1 -0.5 -0.4	11.5	1542.5 -5.4
101	1001 1011	1538.13	1555.6 0.0 -0.4	18.5	1558.3 -2.8
102	1001 1010	1553.75	1570.7 0.4 0.5	15.1	1574.2 -3.5
103	1001 1001	1569.38	1590.5 0.4 0.4	19.8	1590.0 0.4
104	1001 1000	1585.00	1602.8 -0.5 -0.1	12.4	1605.9 -3.0

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1981/12/01 08:45:21 TENNIN TEST FULL PERFORMANCE @ AMBIENT TEMP.

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HS-236 THERMAL MAPPER AUX UNIT TEST MODEL 1, FLT. S/N 3 PAGE 117

1981/12/01 08:51:52 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

13.15.13.15-14 AND THRESHOLD TEST (CAND)= 17. SENSOR=11)

THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	IDEAL VALUE (100)	ANALOG INPUT VOLTAGE (100) LEVELS RATIO- NOMINAL	LOWER	UPPER	INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE POINT	DEVIATION
131	0111 1101	2006.88	2042.1	-1.4	-0.1	19.9	2039.3	2.2
132	0111 1100	2022.50	2061.2	-0.9	0.9	19.1	2055.7	5.5
133	0111 1011	2038.13	2072.4	0.0	-1.4	11.2	2071.6	0.8
134	0111 1010	2053.75	2092.7	-2.2	1.3	20.3	2087.5	5.2
135	0111 1001	2069.38	2106.9	0.0	1.3	14.2	2103.4	3.6
136	0111 1000	2085.00	2118.8	-0.8	-0.8	11.9	2119.3	-0.5
137	0111 0111	2100.63	2133.4	-1.5	-1.5	14.6	2135.1	-1.8
138	0111 0110	2116.25	2150.9	1.1	0.0	17.6	2151.0	-0.1
139	0111 0101	2131.88	2167.4	1.4	1.4	16.5	2166.9	0.5
140	0111 0100	2147.50	2190.5	0.1	1.7	23.0	2182.8	7.6
141	0111 0011	2163.13	2199.0	-1.5	-1.5	8.5	2198.7	0.3
142	0111 0010	2179.75	2219.9	-0.0	-1.1	21.0	2214.6	5.3
143	0111 0001	2194.38	2233.6	1.4	1.4	13.6	2230.5	3.1
144	0111 0000	2210.00	2248.9	1.0	0.9	15.3	2246.4	2.5
145	0110 1111	2225.63	2259.7	-1.6	0.0	10.8	2262.3	-2.6
146	0110 1110	2241.25	2276.5	-1.2	-1.2	16.7	2278.1	-1.7
147	0110 1101	2256.88	2294.7	0.0	-1.3	18.2	2294.0	0.6
148	0110 1100	2272.50	2310.9	1.5	1.4	16.2	2309.9	1.0
149	0110 1011	2288.13	2323.8	0.0	1.4	12.8	2325.8	-2.0
150	0110 1010	2303.75	2347.9	-1.3	-1.3	24.1	2341.7	6.2
151	0110 1001	2319.38	2360.8	-1.3	-1.4	12.9	2357.6	3.2
152	0110 1000	2335.00	2376.1	-1.9	-0.0	15.3	2373.5	2.6
153	0110 0111	2350.63	2384.5	1.4	1.4	8.4	2389.4	-4.9
154	0110 0110	2366.25	2403.6	0.1	1.5	19.1	2405.3	-1.6
155	0110 0101	2381.88	2421.3	-1.5	-1.5	17.7	2421.2	0.2
156	0110 0100	2397.50	2447.7	-6.4	-1.4	26.4	2437.0	10.7
157	0110 0011	2413.13	2450.0	1.5	1.5	2.3	2452.9	-3.0

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THRESHOLD NUMBER	A/D OUTPUT THRESHOLD	DIGITAL VALUE (HV)	ANALOG INPUT VOLTAGE NOMINAL	VOLTAGE LEVELS LOWER	RATIO= 1 : 1 DIFFER	INCREASE FROM PREVIOUS THRESHOLD	BEST FIT STRAIGHT LINE POINT	DEVIATION
158	0110 0010	2428.75	2471.6	1.1	1.1	21.6	2468.8	2.8
159	0110 0001	2444.38	2487.5	-1.3	-0.0	15.9	2484.7	2.7
160	0110 0000	2460.00	2503.5	-1.1	-1.0	16.0	2500.6	2.9
161	0101 1111	2475.63	2511.3	0.0	-1.5	7.8	2516.5	-5.2
162	0101 1110	2491.25	2526.1	1.2	1.2	14.7	2532.4	-6.3
163	0101 1101	2506.88	2544.7	0.0	1.4	18.6	2548.3	-3.6
164	0101 1100	2522.50	2566.1	-1.6	-1.6	21.4	2564.2	1.9
165	0101 1011	2538.13	2576.9	-1.5	1.6	10.8	2580.0	-3.1
166	0101 1010	2553.75	2596.6	-2.2	0.6	19.7	2595.9	0.7
167	0101 1001	2569.38	2611.0	1.3	1.3	14.4	2611.8	-0.8
168	0101 1000	2585.00	2624.7	0.1	0.5	13.7	2627.7	-3.0
169	0101 0111	2600.63	2637.8	-1.4	-1.4	13.0	2643.6	-5.8
170	0101 0110	2616.25	2656.0	0.0	-1.1	18.2	2659.5	-3.5
171	0101 0101	2631.88	2671.4	1.5	1.4	15.3	2675.4	-4.0
172	0101 0100	2647.50	2694.1	-4.3	2.7	22.8	2691.3	2.9
173	0101 0011	2663.13	2703.4	-1.5	-0.0	9.3	2707.2	-3.7
174	0101 0010	2678.75	2724.0	-1.3	-1.4	20.5	2723.0	0.9
175	0101 0001	2694.38	2738.7	0.0	-0.9	14.8	2738.9	-0.2
176	0101 0000	2710.00	2757.0	1.1	1.1	18.2	2754.8	2.1
177	0100 1111	2725.63	2762.7	-0.0	1.5	5.7	2770.7	-8.0
178	0100 1110	2741.25	2780.4	-1.3	-1.3	17.7	2786.6	-6.2
179	0100 1101	2756.88	2798.8	-1.4	-1.4	18.4	2802.5	-3.7
180	0100 1100	2772.50	2815.1	1.7	-0.1	16.3	2818.4	-3.3
181	0100 1011	2788.13	2828.3	1.5	1.6	13.2	2834.3	-6.0
182	0100 1010	2803.75	2846.2	-0.2	1.0	17.9	2850.2	-4.0
183	0100 1001	2819.38	2865.1	-1.5	1.6	18.9	2866.1	-0.9

HS-236 THERMATIC MAPPER MIX UNIT TEST MODEL 1, 111, S/N 3 PAGE 119

1981/12/01 08:51:59 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

4-7-12-201 25/10 THERMATIC MIX UNIT TEST CRONOS 5.5 SENSORS=11



THRESHOLD NUMBER	A/D THRESHOLD	A/D OUTPUT THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV)			INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE	
				NOMINAL	LOWER	UPPER		POINT	DEVIATION
184	0100	1000	2835.00	2886.2	0.0	-1.1	21.0	2881.9	4.2
185	0100	0111	2850.63	2889.3	1.6	1.6	3.2	2897.8	-8.5
186	0100	0110	2866.25	2907.9	1.4	1.4	18.6	2913.7	-5.8
187	0100	0101	2881.88	2925.7	-1.5	-0.0	17.8	2929.6	-3.9
188	0100	0100	2897.50	2946.0	-1.7	1.8	20.1	2947.5	0.5
189	0100	0011	2913.13	2956.5	-0.0	-1.6	10.4	2961.4	-4.9
190	0100	0010	2928.75	2975.9	1.1	1.3	19.4	2977.3	-1.4
191	0100	0001	2944.38	2990.9	-0.0	1.1	15.0	2993.2	-2.3
192	0100	0000	2960.00	3012.1	-1.4	-1.3	21.2	3009.1	3.0
193	0011	1111	2975.63	3020.4	-1.5	-1.5	8.3	3024.9	-4.6
194	0011	1110	2991.25	3035.0	1.3	0.1	14.6	3040.8	-5.8
195	0011	1101	3006.88	3053.8	1.4	1.4	18.8	3056.7	-2.9
196	0011	1100	3022.50	3073.2	-0.0	1.5	19.3	3072.6	0.6
197	0011	1011	3038.13	3086.5	-1.6	-1.6	13.3	3088.5	-2.0
198	0011	1010	3053.75	3106.8	-3.5	-1.4	20.3	3104.4	2.4
199	0011	1001	3069.38	3120.5	1.2	1.1	13.7	3120.3	0.2
200	0011	1000	3085.00	3131.2	1.0	1.0	10.7	3136.2	-4.9
201	0011	0111	3100.63	3147.8	1.9	0.0	16.5	3152.1	-4.3
202	0011	0110	3116.25	3165.9	-1.3	-1.2	18.1	3168.0	-2.1
203	0011	0101	3131.88	3182.9	0.0	-1.6	17.0	3183.8	-1.0
204	0011	0100	3147.50	3204.3	1.9	1.9	21.4	3199.7	4.6
205	0011	0011	3163.13	3212.2	-0.1	1.5	7.9	3215.6	-3.4
206	0011	0010	3178.75	3233.7	-1.1	-1.0	21.5	3231.5	2.2
207	0011	0001	3194.38	3249.6	-1.2	-1.1	15.9	3247.4	2.2
208	0011	0000	3210.00	3265.7	1.0	0.0	16.1	3263.3	2.4
209	0010	1111	3225.63	3273.5	1.7	1.6	7.8	3279.2	-5.6

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HS 206 THERMATIC MASTER MIX UNIT TEST MODEL 111 S/N 3 PAGE 177

1981/12/01 08:58:22 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 11-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100

CHECK 1) RMS ERROR 2) THRESHOLD INCREMENT 0.0 1.5 THRESH INC 1.31.2)
 THE REMAINING DATA ARE FOR INFORMATION ONLY

11-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100

DEVIATION OF SLOPE FROM IDEAL IS: 1.507%
 OFFSET IS: -41.4MV
 COEFFICIENT OF DETERMINATION IS: R002- .99999290
 ANALOG INPUT DURING DC RESTORE IS: 63.9MV

11-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100

11-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100

MAXIMUM	THRESHOLD #	AVERAGE	MINIMUM	THRESHOLD #	STANDARD DEVIATION
23.5MV	139	15.913MV	4.9MV	136	3.807MV
1.4MV	254	-0.192MV	-7.3MV	240	1.139MV
3.0MV	113	0.005MV	1.3MV	200	.874MV

TEST PASSED

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 OF POOR QUALITY

HS-236 THERMATIC MAPPER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 123

1981/12/01 00:58:36 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST: 1111-11 AND THRESHOLD IS TEST (RAND= 5, SENSOR=12)

THRESHOLD AND OUTPUT NUMBER THRESHOLD	IDEAL VALUE (MV)	ANALOG INPUT VOLTAGE (MV) LEVELS RATIO NOMINAL LOWER UPPER	INCREASE FROM PREV THRESHOLD	BEST FIT STRAIGHT LINE POINT DEVIATION
--	------------------------	--	------------------------------------	---

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

1	1111 1111	-24.375	-31.4	0.0	0.2		-20.6	-5.8
2	1111 1110	-8.750	-14.9	0.8	0.8	16.5	-9.7	-5.2
3	1111 1101	6.875	5.7	-0.1	1.0	20.6	6.2	-0.5
4	1111 1100	22.500	18.7	-0.7	0.3	13.0	22.0	-3.3
5	1111 1011	38.125	36.4	-1.1	-1.1	17.6	37.9	-1.5
6	1111 1010	53.750	56.2	-2.1	0.4	19.9	53.7	2.5
7	1111 1001	69.375	72.2	0.9	2.4	16.0	69.6	2.6
8	1111 1000	85.000	82.1	-0.7	-0.0	9.9	85.5	-3.4
9	1111 0111	100.625	97.9	-1.1	-1.0	15.8	101.3	-3.4
10	1111 0110	116.250	116.3	-0.1	-0.9	18.4	117.2	-0.9
11	1111 0101	131.875	134.6	1.0	1.1	18.3	133.1	1.6
12	1111 0100	147.500	150.1	0.6	0.6	15.5	148.9	1.2
13	1111 0011	163.125	164.3	-1.1	-1.0	14.2	164.8	-0.5
14	1111 0010	178.750	184.8	-0.9	-0.8	20.5	180.6	4.1
15	1111 0001	194.375	200.2	0.9	0.0	15.4	196.5	3.7
16	1111 0000	210.000	209.6	0.5	0.6	9.4	212.4	-2.8
17	1110 1111	225.625	224.4	-0.1	0.9	14.8	228.2	-3.8
18	1110 1110	241.250	241.6	-0.9	-0.8	17.2	244.1	-2.4
19	1110 1101	256.875	262.0	-1.0	-1.0	20.4	259.9	2.1
20	1110 1100	272.500	276.3	0.5	0.6	14.2	275.8	0.5
21	1110 1011	288.125	290.7	0.9	0.9	14.4	291.7	-0.9
22	1110 1010	303.750	310.2	-0.9	0.0	19.5	307.5	2.7
23	1110 1001	319.375	328.3	-0.9	-0.8	18.1	323.4	4.9
24	1110 1000	335.000	344.4	-0.0	-0.6	16.1	339.2	5.1
25	1110 0111	350.625	352.1	0.9	1.0	7.8	355.1	-3.0

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IS 236 THERMATIC MAPPER MAX UNIT TEST MODEL 1.1.1. S/N 3 PAGE 126

981/12/01 08:58:36 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.



0010

| UNIT SHIELD AND OUTPUT NUMBER | THRESHOLD | IDEAL VALUE (MV) | ANALOG UNIT OUTPUT LEVELS RATIO | | DIFFERENTIAL | INCREASE FROM PREV THRESHOLD | BEST FIT STRAIGHT LINE | |
|-------------------------------|-----------|------------------|---------------------------------|-------|--------------|------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | | | POINT | DEVIATION |
| 79 | 1011 0001 | 1194.38 | 1212.1 | 0.9 | 1.0 | 16.3 | 1211.6 | 5.5 |
| 80 | 1011 0000 | 1210.00 | 1228.3 | 0.0 | -0.7 | 11.3 | 1222.4 | 0.9 |
| 81 | 1010 1111 | 1225.63 | 1240.9 | 0.9 | 0.9 | 12.5 | 1243.3 | -2.4 |
| 82 | 1010 1110 | 1241.25 | 1256.0 | 0.9 | 0.8 | 15.1 | 1259.1 | -3.1 |
| 83 | 1010 1101 | 1256.88 | 1272.1 | -0.2 | -0.2 | 21.0 | 1275.0 | 2.1 |
| 84 | 1010 1100 | 1272.50 | 1291.2 | -0.7 | 0.7 | 14.1 | 1290.9 | 0.3 |
| 85 | 1010 1011 | 1288.13 | 1306.3 | 1.0 | 0.0 | 15.1 | 1305.2 | -0.4 |
| 86 | 1010 1010 | 1303.75 | 1323.1 | 0.8 | 0.8 | 16.8 | 1322.6 | 0.5 |
| 87 | 1010 1001 | 1319.38 | 1341.8 | 0.0 | 0.9 | 18.7 | 1338.4 | 3.4 |
| 88 | 1010 1000 | 1335.00 | 1359.6 | -0.7 | 0.6 | 17.8 | 1354.3 | 5.3 |
| 89 | 1010 0111 | 1350.63 | 1368.0 | 0.0 | 1.0 | 8.4 | 1370.2 | -2.2 |
| 90 | 1010 0110 | 1366.25 | 1384.5 | 0.8 | 0.9 | 16.5 | 1386.0 | -1.6 |
| 91 | 1010 0101 | 1381.88 | 1402.2 | 1.0 | 0.9 | 17.7 | 1401.9 | 0.3 |
| 92 | 1010 0100 | 1397.50 | 1420.6 | -0.7 | 0.1 | 18.4 | 1417.7 | 2.9 |
| 93 | 1010 0011 | 1413.13 | 1433.2 | -0.9 | -0.9 | 12.6 | 1433.6 | -0.4 |
| 94 | 1010 0010 | 1428.75 | 1453.1 | 0.0 | 1.3 | 19.8 | 1449.5 | 3.6 |
| 95 | 1010 0001 | 1444.38 | 1468.0 | 0.9 | 0.9 | 14.9 | 1465.3 | 2.7 |
| 96 | 1010 0000 | 1460.00 | 1481.7 | -0.0 | 0.6 | 13.7 | 1481.2 | 0.6 |
| 97 | 1001 1111 | 1475.63 | 1492.8 | 1.0 | 1.0 | 11.1 | 1497.0 | -4.2 |
| 98 | 1001 1110 | 1491.25 | 1507.1 | -0.9 | -0.8 | 15.3 | 1512.9 | -5.8 |
| 99 | 1001 1101 | 1506.88 | 1527.8 | 0.8 | 0.1 | 20.7 | 1528.8 | -1.8 |
| 100 | 1001 1100 | 1522.50 | 1538.5 | 0.7 | 0.7 | 10.7 | 1544.6 | -6.2 |
| 101 | 1001 1011 | 1538.13 | 1557.4 | 0.0 | 0.9 | 18.9 | 1560.5 | -3.1 |
| 102 | 1001 1010 | 1553.75 | 1573.3 | -0.8 | -0.8 | 15.9 | 1576.4 | -3.0 |
| 103 | 1001 1001 | 1569.38 | 1593.6 | 0.0 | 1.0 | 20.3 | 1592.2 | 1.4 |
| 104 | 1001 1000 | 1585.00 | 1603.9 | 0.7 | 0.7 | 10.5 | 1608.1 | -4.1 |

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HS-236 THERMATIC MOTOR BOX UNIT TEST MODEL .. FLT. S/N 3 PAGE 130

1981/12/01 08:58:36 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000

11AC
11ST
527

DC 01 '81

| THRESHOLD
NUMBER | A/D
THRESHOLD | OUTPUT
THRESHOLD | DIGITAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|------------------|---------------------|--------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 184 | 0100 | 1000 | 2835.00 | 2879.8 | 0.8 | 0.9 | 20.7 | 2876.9 | 2.9 |
| 185 | 0100 | 0111 | 2850.63 | 2885.0 | 0.0 | 1.0 | 5.1 | 2892.8 | -7.8 |
| 186 | 0100 | 0110 | 2866.25 | 2904.0 | -1.0 | 1.0 | 19.0 | 2908.6 | -4.7 |
| 187 | 0100 | 0101 | 2881.88 | 2919.9 | 0.7 | -0.3 | 15.9 | 2924.5 | -4.6 |
| 188 | 0100 | 0100 | 2897.50 | 2938.9 | 0.9 | 0.9 | 18.9 | 2940.3 | -1.5 |
| 189 | 0100 | 0011 | 2913.13 | 2950.4 | 0.9 | 0.9 | 11.5 | 2956.2 | -1.8 |
| 190 | 0100 | 0010 | 2928.75 | 2971.4 | -1.0 | 0.0 | 21.0 | 2972.1 | -0.6 |
| 191 | 0100 | 0001 | 2944.38 | 2986.6 | -1.1 | -1.1 | 15.2 | 2987.9 | -1.3 |
| 192 | 0100 | 0000 | 2960.00 | 3006.5 | -0.0 | -1.0 | 19.8 | 3007.8 | 2.7 |
| 193 | 0011 | 1111 | 2975.63 | 3014.2 | 1.0 | 1.1 | 7.7 | 3019.7 | -5.5 |
| 194 | 0011 | 1110 | 2991.25 | 3029.7 | -0.1 | 0.9 | 15.5 | 3035.7 | -5.8 |
| 195 | 0011 | 1101 | 3006.88 | 3050.2 | -1.1 | -1.1 | 20.5 | 3051.4 | -1.2 |
| 196 | 0011 | 1100 | 3022.50 | 3068.5 | -1.0 | -1.0 | 18.2 | 3067.2 | 1.2 |
| 197 | 0011 | 1011 | 3038.13 | 3088.1 | 0.9 | -0.1 | 11.7 | 3083.1 | -3.0 |
| 198 | 0011 | 1010 | 3053.75 | 3108.2 | 0.9 | 0.9 | 20.0 | 3099.0 | 1.2 |
| 199 | 0011 | 1001 | 3069.38 | 3116.5 | -1.1 | -0.1 | 16.4 | 3114.8 | 1.7 |
| 200 | 0011 | 1000 | 3085.00 | 3126.6 | -1.3 | -1.3 | 10.0 | 3130.7 | -4.1 |
| 201 | 0011 | 0111 | 3100.63 | 3142.4 | -0.1 | 1.1 | 15.8 | 3146.5 | -4.1 |
| 202 | 0011 | 0110 | 3116.25 | 3159.0 | 1.0 | 1.1 | 16.6 | 3162.4 | -3.4 |
| 203 | 0011 | 0101 | 3131.88 | 3176.2 | 1.1 | 1.1 | 17.2 | 3178.3 | -2.0 |
| 204 | 0011 | 0100 | 3147.50 | 3199.3 | -1.1 | 0.1 | 23.1 | 3194.1 | 5.2 |
| 205 | 0011 | 0011 | 3163.13 | 3208.1 | -1.1 | 1.0 | 8.8 | 3210.0 | -1.8 |
| 206 | 0011 | 0010 | 3178.75 | 3226.7 | 0.9 | -0.0 | 18.6 | 3225.8 | 0.9 |
| 207 | 0011 | 0001 | 3194.38 | 3242.8 | 1.0 | 1.0 | 16.0 | 3241.7 | 1.1 |
| 208 | 0011 | 0000 | 3210.00 | 3260.0 | -5.4 | 0.9 | 17.2 | 3257.6 | 2.4 |
| 209 | 0010 | 1111 | 3225.63 | 3269.5 | -1.1 | -1.1 | 9.5 | 3273.4 | -3.9 |

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| THRESHOLD
NUMBER | A/D
THRESHOLD | OUTPUT
THRESHOLD | IDEAL | ANALOG INPUT VOLTAGE (MV) | | INCREASE | BEST FIT STRAIGHT LINE | | |
|---------------------|------------------|---------------------|---------------|---------------------------|-------|----------|------------------------|--------|-----------|
| | | | VALUE
(MV) | LEVELS RATIO--
NOMINAL | LOWER | UPPER | FROM FROV
THRESHOLD | POINT | DEVIATION |
| 210 | 0010 | 1110 | 3241.25 | 3285.2 | -1.3 | -1.1 | 15.7 | 3289.3 | -4.1 |
| 211 | 0010 | 1101 | 3256.88 | 3303.1 | 0.9 | -0.1 | 17.9 | 3305.1 | -2.0 |
| 212 | 0010 | 1100 | 3272.50 | 3318.9 | 0.9 | 0.9 | 15.8 | 3321.0 | -2.1 |
| 213 | 0010 | 1011 | 3288.13 | 3335.5 | -1.1 | 0.0 | 16.5 | 3336.9 | -1.4 |
| 214 | 0010 | 1010 | 3303.75 | 3356.9 | -1.2 | -1.2 | 21.5 | 3362.7 | 4.2 |
| 215 | 0010 | 1001 | 3319.38 | 3370.7 | -0.1 | -1.1 | 13.8 | 3368.6 | 2.1 |
| 216 | 0010 | 1000 | 3335.00 | 3386.6 | 0.8 | 0.9 | 15.9 | 3384.4 | 2.2 |
| 217 | 0010 | 0111 | 3350.63 | 3395.9 | 1.1 | 1.1 | 9.3 | 3400.3 | -4.4 |
| 218 | 0010 | 0110 | 3366.25 | 3415.0 | -1.2 | 0.0 | 19.1 | 3416.2 | -1.2 |
| 219 | 0010 | 0101 | 3381.88 | 3431.8 | -1.2 | -1.0 | 16.9 | 3432.0 | -0.2 |
| 220 | 0010 | 0100 | 3397.50 | 3448.6 | 1.1 | -0.1 | 16.8 | 3447.9 | 0.7 |
| 221 | 0010 | 0011 | 3413.13 | 3462.0 | 0.9 | 1.0 | 13.3 | 3463.7 | -1.8 |
| 222 | 0010 | 0010 | 3428.75 | 3481.7 | -0.1 | 1.1 | 19.8 | 3479.6 | 2.1 |
| 223 | 0010 | 0001 | 3444.38 | 3498.5 | -1.4 | -1.1 | 16.7 | 3495.5 | 3.0 |
| 224 | 0010 | 0000 | 3460.00 | 3514.6 | -1.0 | -0.8 | 16.1 | 3511.3 | 3.3 |
| 225 | 0001 | 1111 | 3475.63 | 3526.0 | -2.5 | -0.0 | 11.4 | 3527.7 | -1.1 |
| 226 | 0001 | 1110 | 3491.25 | 3547.3 | 1.2 | 1.2 | 11.3 | 3543.0 | -5.7 |
| 227 | 0001 | 1101 | 3506.88 | 3558.3 | -1.1 | 0.0 | 21.0 | 3558.9 | -0.6 |
| 228 | 0001 | 1100 | 3522.50 | 3571.1 | -1.0 | -1.0 | 12.8 | 3574.0 | -3.7 |
| 229 | 0001 | 1011 | 3538.13 | 3590.1 | -0.6 | -1.2 | 19.0 | 3590.6 | -0.5 |
| 230 | 0001 | 1010 | 3553.75 | 3608.4 | 0.9 | 1.0 | 18.3 | 3606.5 | 1.9 |
| 231 | 0001 | 1001 | 3569.38 | 3623.9 | 1.1 | 1.2 | 15.4 | 3622.3 | 1.5 |
| 232 | 0001 | 1000 | 3585.00 | 3647.0 | -1.0 | 0.0 | 13.2 | 3638.2 | -1.2 |
| 233 | 0001 | 0111 | 3600.63 | 3651.8 | -1.1 | -1.0 | 14.7 | 3654.1 | -2.3 |
| 234 | 0001 | 0110 | 3616.25 | 3667.9 | 1.2 | 0.0 | 16.1 | 3669.9 | -2.1 |
| 235 | 0001 | 0101 | 3631.88 | 3685.5 | 0.8 | 0.7 | 17.6 | 3687.8 | -0.3 |
| 236 | 0001 | 0100 | 3647.50 | 3700.6 | -0.1 | 0.9 | 15.1 | 3701.7 | -1.1 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL... FLT. S/N 3 PAGE 132

1981/12/01 08:58:36 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

4.1.1.1.5-11 0/10 THRESHOLD 10 100 0.0000 = 1.0 33.4500 = 1.22

11/12/81
5.27
000101

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 237 0001 0011 | 3663.13 | 3718.1 | -1.3 | -1.1 | 17.5 | 3717.5 | 0.6 |
| 238 0001 0010 | 3678.75 | 3736.9 | -1.2 | -1.1 | 18.8 | 3733.4 | 3.6 |
| 239 0001 0001 | 3694.38 | 3752.4 | 1.1 | -0.0 | 15.4 | 3749.2 | 3.1 |
| 240 0001 0000 | 3710.00 | 3774.8 | -7.3 | 1.0 | 22.4 | 3765.1 | 9.7 |
| 241 0000 1111 | 3725.63 | 3783.6 | -1.2 | 0.0 | 8.8 | 3781.0 | 2.6 |
| 242 0000 1110 | 3741.25 | 3795.2 | -1.1 | -1.1 | 11.6 | 3796.8 | -1.6 |
| 243 0000 1101 | 3756.88 | 3814.6 | -0.2 | -1.1 | 19.4 | 3812.7 | 2.0 |
| 244 0000 1100 | 3772.50 | 3829.5 | 0.9 | 1.1 | 14.8 | 3828.5 | 0.9 |
| 245 0000 1011 | 3788.13 | 3845.5 | 1.0 | 1.1 | 16.0 | 3844.4 | 1.1 |
| 246 0000 1010 | 3803.75 | 3867.6 | -1.2 | 0.0 | 22.1 | 3860.3 | 7.3 |
| 247 0000 1001 | 3819.38 | 3881.6 | -1.5 | -1.1 | 14.0 | 3876.1 | 5.5 |
| 248 0000 1000 | 3835.00 | 3902.3 | -4.5 | 0.1 | 20.7 | 3892.0 | 10.3 |
| 249 0000 0111 | 3850.63 | 3907.5 | 0.7 | 1.0 | 5.2 | 3907.8 | -0.3 |
| 250 0000 0110 | 3866.25 | 3924.9 | -0.3 | 1.2 | 17.4 | 3923.7 | 1.2 |
| 251 0000 0101 | 3881.88 | 3943.3 | -1.2 | -1.1 | 18.4 | 3939.6 | 3.8 |
| 252 0000 0100 | 3897.50 | 3961.5 | -0.9 | -1.0 | 18.2 | 3955.4 | 6.1 |
| 253 0000 0011 | 3913.13 | 3974.0 | 0.9 | -0.1 | 12.5 | 3971.3 | 2.7 |
| 254 0000 0010 | 3928.75 | 3992.9 | 1.4 | 1.6 | 18.8 | 3987.1 | 5.7 |
| 255 0000 0001 | 3944.38 | 4010.6 | -1.6 | -0.0 | 17.7 | 4003.0 | 7.6 |

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OF POOR QUALITY

HS 236 THERMATIC MAPPER MUX UNIT TEST MODEL: F11, S/N 3 PAGE 134

1981/12/01 09:05:13 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1.15.13.5-13 A/D HALF-STEP 10 TO 51 CHANNELS 5. SENSOR=13



000100

| THRESHOLD A/D OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(mV) | ANALOG INPUT VOLTAGE (mV)
LEVELS RATIO-
NOMINAL LOWER UPPER | INCREASE
FROM PREV
THRESHOLD | FIRST FULL STRAIGHT LINE
POINT DEVIATION |
|--|------------------------|---|------------------------------------|---|
|--|------------------------|---|------------------------------------|---|

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | |
|----|-----------|---------|-------|------|------|-------|------|
| 1 | 1111 1111 | -24.375 | -30.8 | -0.2 | 0.9 | -25.3 | -5.5 |
| 2 | 1111 1110 | -8.750 | -14.1 | -0.6 | 0.0 | -9.5 | -4.7 |
| 3 | 1111 1101 | 6.875 | 7.0 | -0.9 | -0.8 | 6.4 | 0.6 |
| 4 | 1111 1100 | 22.500 | 19.8 | -0.0 | -1.1 | 22.3 | -2.7 |
| 5 | 1111 1011 | 38.125 | 35.8 | 0.6 | 0.7 | 38.1 | -2.3 |
| 6 | 1111 1010 | 53.750 | 53.8 | 0.5 | 0.6 | 54.0 | -0.2 |
| 7 | 1111 1001 | 69.375 | 73.3 | -0.6 | 0.0 | 69.9 | 3.4 |
| 8 | 1111 1000 | 85.000 | 83.0 | -0.8 | -0.8 | 85.7 | -2.7 |
| 9 | 1111 0111 | 100.625 | 98.1 | -0.0 | -0.7 | 101.6 | -3.5 |
| 10 | 1111 0110 | 116.250 | 115.7 | 0.4 | 0.5 | 117.4 | -1.7 |
| 11 | 1111 0101 | 131.875 | 135.4 | 0.1 | -0.4 | 133.3 | 2.1 |
| 12 | 1111 0100 | 147.500 | 151.8 | -1.0 | -1.0 | 149.2 | 2.6 |
| 13 | 1111 0011 | 163.125 | 164.4 | -0.7 | -0.6 | 165.0 | -0.6 |
| 14 | 1111 0010 | 178.750 | 184.6 | 0.5 | 0.0 | 180.9 | 3.7 |
| 15 | 1111 0001 | 194.375 | 200.5 | 0.6 | 0.7 | 196.7 | 3.8 |
| 16 | 1111 0000 | 210.000 | 209.4 | -0.1 | 0.3 | 212.6 | -3.2 |
| 17 | 1110 1111 | 225.625 | 225.5 | -0.7 | -0.7 | 228.5 | -3.0 |
| 18 | 1110 1110 | 241.250 | 241.5 | -0.1 | -0.4 | 244.3 | -2.8 |
| 19 | 1110 1101 | 256.875 | 261.6 | 0.5 | 0.6 | 260.2 | 1.4 |
| 20 | 1110 1100 | 272.500 | 277.0 | 1.0 | 1.0 | 276.0 | 0.9 |
| 21 | 1110 1011 | 288.125 | 291.8 | -0.6 | 0.0 | 291.9 | -0.1 |
| 22 | 1110 1010 | 303.750 | 310.1 | -0.4 | -0.3 | 307.8 | 2.4 |
| 23 | 1110 1001 | 319.375 | 328.5 | -0.1 | -0.5 | 323.6 | 4.9 |
| 24 | 1110 1000 | 335.000 | 344.1 | 0.3 | 0.4 | 339.5 | 4.6 |
| 25 | 1110 0111 | 350.625 | 352.6 | -0.0 | 0.6 | 355.4 | -2.8 |

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HS-276 THERMATIC MAPPER MUX UNIT TEST MODEL 1.1.1. S/N 3 PAGE 130

1981/12/01 09:05:13 TERNALY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST # 12.5.1.3 A/D THRESHOLD TEST CHANNEL 5.0 SENSORS=100



0001

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 26 | 1110 0110 | 366.250 | 371.7 | -0.5 | -0.4 | 19.1 | 371.2 | 0.5 |
| 27 | 1110 0101 | 381.875 | 390.0 | 0.0 | -0.3 | 18.3 | 387.1 | 2.9 |
| 28 | 1110 0100 | 397.500 | 409.0 | 0.9 | 0.0 | 19.0 | 402.9 | 6.1 |
| 29 | 1110 0011 | 413.125 | 418.9 | 0.5 | 0.5 | 9.8 | 418.8 | 0.1 |
| 30 | 1110 0010 | 428.750 | 440.0 | -0.1 | 0.5 | 21.2 | 434.7 | 5.4 |
| 31 | 1110 0001 | 444.375 | 456.2 | -0.6 | -0.6 | 16.1 | 450.5 | 5.6 |
| 32 | 1110 0000 | 460.000 | 463.4 | -0.0 | -0.8 | 7.2 | 466.4 | -3.0 |
| 33 | 1101 1111 | 475.625 | 478.7 | 0.5 | 0.6 | 15.3 | 482.2 | -3.5 |
| 34 | 1101 1110 | 491.250 | 494.1 | 0.4 | 0.4 | 15.4 | 498.1 | -4.0 |
| 35 | 1101 1101 | 506.875 | 515.8 | -0.6 | 0.0 | 21.6 | 514.0 | 1.8 |
| 36 | 1101 1100 | 522.500 | 528.8 | -1.0 | -1.0 | 13.0 | 529.8 | -1.0 |
| 37 | 1101 1011 | 538.125 | 545.6 | -0.0 | -0.6 | 14.8 | 545.7 | -0.1 |
| 38 | 1101 1010 | 553.750 | 562.3 | 0.3 | 0.3 | 16.7 | 561.5 | 0.8 |
| 39 | 1101 1001 | 569.375 | 581.6 | -0.0 | 0.6 | 19.3 | 577.4 | 4.2 |
| 40 | 1101 1000 | 585.000 | 594.1 | -0.6 | -0.6 | 12.4 | 593.3 | 0.8 |
| 41 | 1101 0111 | 600.625 | 606.8 | -0.7 | -0.6 | 12.7 | 609.1 | -2.3 |
| 42 | 1101 0110 | 616.250 | 623.8 | 0.4 | 0.1 | 17.0 | 625.0 | -1.2 |
| 43 | 1101 0101 | 631.875 | 643.2 | 0.2 | 0.2 | 19.4 | 640.9 | 2.4 |
| 44 | 1101 0100 | 647.500 | 658.9 | -0.0 | 0.7 | 15.7 | 656.7 | 2.2 |
| 45 | 1101 0011 | 663.125 | 672.8 | -0.5 | -0.5 | 13.9 | 672.6 | 0.2 |
| 46 | 1101 0010 | 678.750 | 692.7 | -0.1 | 0.3 | 19.9 | 688.4 | 4.3 |
| 47 | 1101 0001 | 694.375 | 708.7 | 0.5 | 0.5 | 15.9 | 704.3 | 4.4 |
| 48 | 1101 0000 | 710.000 | 724.3 | 0.2 | 0.3 | 15.7 | 720.2 | 4.2 |
| 49 | 1100 1111 | 725.625 | 733.5 | -0.6 | 0.0 | 9.2 | 736.0 | -2.5 |
| 50 | 1100 1110 | 741.250 | 749.0 | -0.5 | -0.4 | 15.5 | 751.9 | -2.9 |
| 51 | 1100 1101 | 756.875 | 769.6 | 0.0 | -0.5 | 20.6 | 767.7 | 1.9 |

CHANGES FROM 13
OF POOR QUALITY

HS-296 THERMATIC MAPPER BOX UNIT TEST MODEL . . . FLT. S/N 3 PAGE 136

1981/12/01 09:05:13 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST RESULTS: 100% PASS



000101

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | ELST FLT STRAIGHT LINE | |
|--|------------------------|---------------------------|--------|-------|------------------------------------|------------------------|-------------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 52 | 1100 1100 | 772.500 | 784.6 | 0.8 | 0.9 | 15.0 | 783.6 1.0 |
| 53 | 1100 1011 | 788.125 | 798.6 | -0.1 | 0.8 | 14.0 | 799.5 -0.8 |
| 54 | 1100 1010 | 803.750 | 816.9 | -0.4 | -0.3 | 18.2 | 815.3 1.5 |
| 55 | 1100 1001 | 819.375 | 835.8 | -0.7 | -0.8 | 18.9 | 831.2 4.6 |
| 56 | 1100 1000 | 835.000 | 851.6 | 0.3 | 0.0 | 15.7 | 847.0 4.5 |
| 57 | 1100 0111 | 850.625 | 859.7 | 0.5 | 0.5 | 8.2 | 862.9 -0.2 |
| 58 | 1100 0110 | 866.250 | 877.6 | -0.0 | 0.4 | 17.8 | 878.8 -1.2 |
| 59 | 1100 0101 | 881.875 | 896.4 | -0.2 | -0.4 | 18.8 | 894.6 1.8 |
| 60 | 1100 0100 | 897.500 | 915.9 | 0.1 | -0.8 | 19.5 | 910.5 5.4 |
| 61 | 1100 0011 | 913.125 | 925.3 | 0.5 | 0.5 | 9.4 | 926.4 -1.1 |
| 62 | 1100 0010 | 928.750 | 945.7 | 0.4 | 0.4 | 20.4 | 942.2 3.5 |
| 63 | 1100 0001 | 944.375 | 962.0 | -0.6 | 0.0 | 16.3 | 958.1 4.0 |
| 64 | 1100 0000 | 960.000 | 977.6 | -0.6 | -0.6 | 15.6 | 973.9 3.7 |
| 65 | 1011 1111 | 975.625 | 989.3 | 0.0 | -0.6 | 11.7 | 989.8 -0.5 |
| 66 | 1011 1110 | 991.250 | 1003.6 | 0.4 | 0.5 | 14.3 | 1005.7 -2.0 |
| 67 | 1011 1101 | 1006.88 | 1024.4 | 0.0 | 0.6 | 20.8 | 1021.5 2.9 |
| 68 | 1011 1100 | 1022.50 | 1037.1 | -0.9 | -0.8 | 12.7 | 1037.4 -0.3 |
| 69 | 1011 1011 | 1038.13 | 1055.1 | -0.6 | -0.6 | 18.0 | 1053.2 1.8 |
| 70 | 1011 1010 | 1053.75 | 1071.2 | 0.1 | -0.0 | 16.1 | 1069.1 2.1 |
| 71 | 1011 1001 | 1069.38 | 1090.4 | 0.7 | 0.7 | 19.1 | 1085.0 5.4 |
| 72 | 1011 1000 | 1085.00 | 1099.6 | 0.0 | 0.7 | 9.2 | 1100.8 -1.2 |
| 73 | 1011 0111 | 1100.63 | 1115.9 | -0.6 | -0.7 | 16.3 | 1116.7 -0.8 |
| 74 | 1011 0110 | 1116.25 | 1132.8 | 0.0 | -0.5 | 16.9 | 1132.6 0.3 |
| 75 | 1011 0101 | 1131.88 | 1150.8 | 0.7 | 0.7 | 18.0 | 1148.4 2.4 |
| 76 | 1011 0100 | 1147.50 | 1169.2 | -1.8 | 0.5 | 18.4 | 1164.3 4.9 |
| 77 | 1011 0011 | 1163.13 | 1181.4 | -0.6 | 0.0 | 12.7 | 1180.1 1.2 |
| 78 | 1011 0010 | 1178.75 | 1200.4 | -0.4 | -0.4 | 19.0 | 1196.0 4.4 |

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OF POOR QUALITY

113 236 THERMATIC MAPPER BOX UNIT TEST MODEL 11, ECU, S/N 3 PAGE 138

1981/12/01 09:05:13 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1.17.11.5--42 AND THRESHOLD IS OF 151 (RANGE) 5. SENSITIVITY=1.24

113
113
527

| THRESHOLD
NUMBER | AND OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE #017 | |
|---------------------|-------------------------|------------------------|---------------------------|-------|------------------------------------|-----------------------------|-----------|
| | | | NOMINAL | LOWER | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1619.2 | -0.7 | 0.0 | 1624.2 | -5.0 |
| 106 | 1001 0110 | 1616.25 | 1635.5 | -0.4 | -0.4 | 1640.1 | -4.6 |
| 107 | 1001 0101 | 1631.88 | 1654.4 | 0.0 | -0.0 | 1656.0 | -1.5 |
| 108 | 1001 0100 | 1647.50 | 1668.5 | 1.0 | 1.0 | 1671.8 | -3.3 |
| 109 | 1001 0011 | 1663.13 | 1683.9 | 0.0 | 0.7 | 1687.7 | -3.8 |
| 110 | 1001 0010 | 1678.75 | 1702.8 | -0.9 | -0.8 | 1703.6 | -0.7 |
| 111 | 1001 0001 | 1694.38 | 1720.6 | 0.9 | -0.8 | 1719.4 | 1.2 |
| 112 | 1001 0000 | 1710.00 | 1733.3 | 0.4 | -0.0 | 1735.3 | -2.6 |
| 113 | 1000 1111 | 1725.63 | 1744.4 | 0.6 | 0.7 | 1751.1 | -6.7 |
| 114 | 1000 1110 | 1741.25 | 1759.0 | -0.1 | 0.5 | 1767.0 | -8.0 |
| 115 | 1000 1101 | 1756.88 | 1780.5 | 0.5 | 0.4 | 1782.9 | -2.4 |
| 116 | 1000 1100 | 1772.50 | 1795.1 | 0.0 | -0.9 | 1798.7 | -3.6 |
| 117 | 1000 1011 | 1788.13 | 1809.9 | 0.6 | 0.6 | 1814.6 | -4.7 |
| 118 | 1000 1010 | 1803.75 | 1826.1 | 0.4 | 9.3 | 1830.4 | -4.4 |
| 119 | 1000 1001 | 1819.38 | 1846.0 | 0.8 | 0.0 | 1846.3 | -0.3 |
| 120 | 1000 1000 | 1835.00 | 1861.7 | -0.4 | -0.3 | 1862.2 | -0.5 |
| 121 | 1000 0111 | 1850.63 | 1871.0 | -0.0 | -0.6 | 1878.0 | -7.0 |
| 122 | 1000 0110 | 1866.25 | 1887.2 | 0.1 | 0.0 | 1893.9 | 6.6 |
| 123 | 1000 0101 | 1881.88 | 1905.6 | -0.1 | 0.7 | 1909.7 | -4.2 |
| 124 | 1000 0100 | 1897.50 | 1924.4 | -1.0 | -0.9 | 1925.6 | 1.2 |
| 125 | 1000 0011 | 1913.13 | 1935.9 | 0.0 | 0.0 | 1941.5 | -5.5 |
| 126 | 1000 0010 | 1928.75 | 1954.9 | 0.3 | -0.0 | 1957.3 | 2.4 |
| 127 | 1000 0001 | 1944.38 | 1971.5 | 0.7 | 0.7 | 1973.2 | -1.7 |
| 128 | 1000 0000 | 1960.00 | 1993.1 | 0.1 | 0.6 | 1989.1 | 4.1 |
| 129 | 0111 1111 | 1975.63 | 2003.9 | 0.7 | -0.7 | 2004.9 | -1.0 |
| 130 | 0111 1110 | 1991.25 | 2019.7 | -0.1 | 0.6 | 2026.8 | -1.1 |

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OF POOR QUALITY

HS 236 THERMATIC MAPPER MIX UNIT TEST MODEL 1111 S/N 3 PAGE 142

1981/12/01 09:05:13 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

THRESHOLD A/D OUTPUT IDUAL ANALOG INPUT VOLTAGE (MV) INCREASE BEST FIT STRAIGHT LINE
NUMBER THRESHOLD VALUE LEVELS RATIO- 1:1 FROM PREV POINT DEVIATION
THRESHOLD

| THRESHOLD NUMBER | A/D THRESHOLD | IDUAL VALUE (MV) | ANALOG INPUT VOLTAGE (MV) | LEVELS RATIO- 1:1 | INCREASE FROM PREV THRESHOLD | BEST FIT STRAIGHT LINE POINT | DEVIATION |
|------------------|---------------|------------------|---------------------------|-------------------|------------------------------|------------------------------|-----------|
| 210 | 0010 1110 | 3241.25 | 3284.6 | 0.8 | 0.1 | 3289.7 | -5.0 |
| 211 | 0010 1101 | 3256.00 | 3303.9 | 0.9 | 1.0 | 3305.5 | -1.7 |
| 212 | 0010 1100 | 3272.50 | 3320.1 | 0.0 | 1.2 | 3321.4 | -1.3 |
| 213 | 0010 1011 | 3288.13 | 3336.2 | -0.9 | 0.9 | 3337.3 | -1.1 |
| 214 | 0010 1010 | 3303.75 | 3353.1 | -0.6 | -0.5 | 3353.1 | 0.0 |
| 215 | 0010 1001 | 3319.38 | 3370.5 | 1.0 | 1.0 | 3369.0 | 1.6 |
| 216 | 0010 1000 | 3335.00 | 3383.1 | 0.6 | 0.7 | 3384.0 | -1.7 |
| 217 | 0010 0111 | 3350.63 | 3397.7 | -1.0 | 0.0 | 3400.7 | -3.0 |
| 218 | 0010 0110 | 3366.25 | 3415.4 | -1.1 | -0.9 | 3416.6 | -1.2 |
| 219 | 0010 0101 | 3381.88 | 3432.3 | 0.0 | -0.8 | 3432.4 | -0.1 |
| 220 | 0010 0100 | 3397.50 | 3450.2 | 1.2 | 1.3 | 3448.3 | 1.9 |
| 221 | 0010 0011 | 3413.13 | 3462.6 | 1.1 | 1.1 | 3464.1 | -1.5 |
| 222 | 0010 0010 | 3428.75 | 3483.6 | -0.7 | -0.6 | 3480.0 | 3.6 |
| 223 | 0010 0001 | 3444.38 | 3499.7 | -1.1 | -1.1 | 3495.9 | 3.8 |
| 224 | 0010 0000 | 3460.00 | 3514.5 | -3.9 | 0.1 | 3511.7 | 2.8 |
| 225 | 0001 1111 | 3475.63 | 3523.2 | 1.0 | 1.1 | 3527.6 | -4.4 |
| 226 | 0001 1110 | 3491.25 | 3538.3 | -0.1 | 1.1 | 3543.4 | -5.2 |
| 227 | 0001 1101 | 3506.88 | 3558.9 | -1.0 | -0.8 | 3559.3 | -0.4 |
| 228 | 0001 1100 | 3522.50 | 3578.2 | -3.3 | -1.1 | 3575.2 | 3.0 |
| 229 | 0001 1011 | 3538.13 | 3589.5 | 1.1 | 0.0 | 3591.0 | -1.6 |
| 230 | 0001 1010 | 3553.75 | 3605.7 | 0.6 | 0.6 | 3606.9 | -1.2 |
| 231 | 0001 1001 | 3569.38 | 3625.9 | -0.9 | 0.0 | 3622.8 | 3.1 |
| 232 | 0001 1000 | 3585.00 | 3639.0 | -1.0 | -1.1 | 3638.6 | 0.4 |
| 233 | 0001 0111 | 3600.63 | 3652.2 | 0.0 | -0.6 | 3654.5 | -2.3 |
| 234 | 0001 0110 | 3616.25 | 3668.4 | 0.8 | 1.0 | 3670.3 | -1.9 |
| 235 | 0001 0101 | 3631.88 | 3686.3 | -0.0 | 1.1 | 3686.2 | 0.1 |
| 236 | 0001 0100 | 3647.50 | 3703.3 | -0.7 | -0.1 | 3702.1 | 1.3 |

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HS-236 DYNAMIC MAPPER MAX UNIT TEST MODEL 1, FULL SIZE PAGE 141

1981/12/01 09:00:13 EQUALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

01.01.01.01-13 0/00 THRESHOLD TEST CHANNEL= 57 SENSORS=13

| THRESHOLD
NUMBER | 220
THRESHOLD | 220
OUTPUT
THRESHOLD | IDEAL
VALUE
(400) | ANALOG THRESHOLD VOLTAGE (400) | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | |
|---------------------|------------------|----------------------------|-------------------------|--------------------------------|-------|------------------------------------|------------------------|-----------|------|
| | | | | LEVELS RATIO
ORIGINAL | LOWER | | POINT | DEVIATION | |
| 237 | 0001 | 0011 | 3663.13 | 3718.6 | 0.0 | -0.8 | 15.3 | 3717.9 | 0.7 |
| 238 | 0001 | 0010 | 3678.75 | 3732.5 | 0.5 | 0.1 | 18.8 | 3733.8 | 3.7 |
| 239 | 0001 | 0001 | 3694.08 | 3753.7 | 1.0 | 1.1 | 16.2 | 3749.6 | 4.0 |
| 240 | 0001 | 0000 | 3710.00 | 3775.0 | -2.2 | 0.0 | 21.4 | 3765.5 | 2.5 |
| 241 | 0000 | 1111 | 3725.63 | 3780.6 | -0.9 | 0.9 | 5.6 | 3781.4 | -0.7 |
| 242 | 0000 | 1110 | 3741.75 | 3795.4 | -0.7 | -0.7 | 14.8 | 3797.2 | -1.8 |
| 243 | 0000 | 1101 | 3756.68 | 3814.4 | 0.7 | 1.0 | 18.9 | 3813.1 | 1.3 |
| 244 | 0000 | 1100 | 3772.50 | 3830.7 | 1.3 | 1.4 | 16.3 | 3828.9 | 1.8 |
| 245 | 0000 | 1011 | 3788.13 | 3847.3 | -1.0 | 0.0 | 16.6 | 3844.8 | 2.5 |
| 246 | 0000 | 1010 | 3803.75 | 3864.0 | -0.9 | -0.8 | 16.6 | 3860.7 | 3.3 |
| 247 | 0000 | 1001 | 3819.38 | 3882.6 | -0.1 | -1.0 | 18.6 | 3876.5 | 6.1 |
| 248 | 0000 | 1000 | 3835.00 | 3902.9 | 0.5 | 0.8 | 20.3 | 3892.4 | 10.6 |
| 249 | 0000 | 0111 | 3850.63 | 3908.2 | 1.0 | 1.1 | 5.3 | 3908.3 | -0.0 |
| 250 | 0000 | 0110 | 3866.25 | 3926.5 | -0.9 | 0.1 | 18.2 | 3924.1 | 2.4 |
| 251 | 0000 | 0101 | 3881.88 | 3944.1 | -1.1 | -1.0 | 17.6 | 3940.0 | 4.1 |
| 252 | 0000 | 0100 | 3897.50 | 3961.8 | 1.0 | 0.0 | 17.7 | 3955.8 | 6.0 |
| 253 | 0000 | 0011 | 3913.13 | 3974.9 | 1.0 | 1.1 | 13.1 | 3971.7 | 3.2 |
| 254 | 0000 | 0010 | 3928.75 | 3994.7 | -0.2 | 0.5 | 19.8 | 3987.6 | 7.2 |
| 255 | 0000 | 0001 | 3944.38 | 4011.9 | -1.2 | -1.0 | 17.1 | 4003.4 | 8.4 |

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010101

HS-236 THERMATIC MAPPER MUX UNIT TEST MODEL 1111 S/N 3 PAGE 145

1981/12/01 09:11:50 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

34.15.13.11-11 AND THRESHOLD IN TEST (BAND= 57 SENSOR=14)



| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | |
|----|-----------|---------|-------|------|------|-------|------|
| 1 | 1111 1111 | -24.375 | -33.0 | -0.3 | 0.0 | -27.0 | -6.1 |
| 2 | 1111 1110 | -8.750 | -15.8 | -1.2 | -1.1 | -11.1 | -4.7 |
| 3 | 1111 1101 | 6.875 | 5.3 | 0.5 | 0.6 | 4.8 | 0.5 |
| 4 | 1111 1100 | 22.500 | 15.7 | -0.2 | -0.0 | 20.7 | -4.9 |
| 5 | 1111 1011 | 38.125 | 33.7 | -0.2 | -0.1 | 36.5 | -2.8 |
| 6 | 1111 1010 | 53.750 | 45.2 | -3.6 | 0.8 | 52.4 | 2.8 |
| 7 | 1111 1001 | 69.375 | 73.0 | -0.4 | -0.3 | 68.3 | 4.7 |
| 8 | 1111 1000 | 85.000 | 81.2 | -0.9 | 0.9 | 84.2 | -3.0 |
| 9 | 1111 0111 | 100.625 | 95.2 | -0.2 | -0.1 | 100.0 | -4.8 |
| 10 | 1111 0110 | 116.250 | 113.5 | 1.0 | 1.0 | 115.9 | -2.4 |
| 11 | 1111 0101 | 131.875 | 134.1 | -0.1 | -0.1 | 131.8 | 2.3 |
| 12 | 1111 0100 | 147.500 | 147.9 | 0.0 | 0.1 | 147.6 | 0.3 |
| 13 | 1111 0011 | 163.125 | 161.6 | -0.1 | 0.1 | 163.5 | -1.9 |
| 14 | 1111 0010 | 178.750 | 182.2 | 1.0 | 1.1 | 179.4 | 2.8 |
| 15 | 1111 0001 | 194.375 | 201.2 | -0.2 | -0.4 | 195.3 | 5.9 |
| 16 | 1111 0000 | 210.000 | 207.7 | -0.8 | -0.0 | 211.1 | -3.4 |
| 17 | 1110 1111 | 225.625 | 222.6 | 0.1 | 0.1 | 227.0 | -4.4 |
| 18 | 1110 1110 | 241.250 | 238.9 | 1.1 | 0.0 | 242.9 | -3.9 |
| 19 | 1110 1101 | 256.875 | 261.6 | -1.0 | -0.8 | 258.8 | 2.9 |
| 20 | 1110 1100 | 272.500 | 274.2 | -0.1 | -0.3 | 274.6 | -0.4 |
| 21 | 1110 1011 | 288.125 | 289.1 | 0.1 | 0.1 | 290.5 | -1.4 |
| 22 | 1110 1010 | 303.750 | 312.3 | -1.7 | -1.6 | 306.4 | 5.9 |
| 23 | 1110 1001 | 319.375 | 328.2 | 0.1 | 0.0 | 322.3 | 5.9 |
| 24 | 1110 1000 | 335.000 | 342.5 | 0.1 | 0.2 | 338.1 | 4.4 |
| 25 | 1110 0111 | 350.625 | 350.6 | 0.1 | -0.0 | 354.0 | -3.4 |

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HS-236 TH-236 TH-236 MAPPER MUX UNIT TEST MODEL... P.L. S/N 3 PAGE 151

1981/12/01 09:11:50 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|------------------------------------|------------------------|-------------|
| | | | NOMINAL | LOWER | | POINT | DEVIATION |
| 158 | 0110 0010 | 2428.75 | 2468.6 | -1.3 | -1.2 | 22.0 | 2465.2 3.4 |
| 159 | 0110 0001 | 2444.38 | 2487.5 | -1.4 | -1.4 | 18.9 | 2481.1 6.4 |
| 160 | 0110 0000 | 2460.00 | 2494.4 | 0.3 | 0.3 | 6.9 | 2497.0 -2.6 |
| 161 | 0101 1111 | 2475.63 | 2506.3 | -0.1 | -0.0 | 11.9 | 2512.8 -6.6 |
| 162 | 0101 1110 | 2491.25 | 2522.7 | -1.2 | -1.1 | 16.4 | 2528.7 -6.0 |
| 163 | 0101 1101 | 2506.88 | 2547.9 | -0.0 | -0.1 | 25.2 | 2544.6 3.3 |
| 164 | 0101 1100 | 2522.50 | 2564.6 | -0.0 | -0.0 | 6.7 | 2560.5 -5.9 |
| 165 | 0101 1011 | 2538.13 | 2571.8 | 0.1 | 0.1 | 17.2 | 2576.3 -4.5 |
| 166 | 0101 1010 | 2553.75 | 2593.2 | -0.4 | -0.4 | 21.4 | 2592.2 1.0 |
| 167 | 0101 1001 | 2569.38 | 2613.3 | -0.1 | -0.1 | 20.1 | 2608.1 5.2 |
| 168 | 0101 1000 | 2585.00 | 2620.3 | 0.8 | 0.0 | 7.0 | 2624.0 -3.6 |
| 169 | 0101 0111 | 2600.63 | 2632.7 | 0.1 | 0.0 | 12.4 | 2639.8 -7.1 |
| 170 | 0101 0110 | 2616.25 | 2650.3 | 0.0 | 1.2 | 17.6 | 2655.7 -5.4 |
| 171 | 0101 0101 | 2631.88 | 2674.1 | 0.1 | 0.0 | 23.8 | 2671.6 2.5 |
| 172 | 0101 0100 | 2647.50 | 2683.4 | 0.2 | -0.2 | 9.3 | 2687.4 -4.0 |
| 173 | 0101 0011 | 2663.13 | 2698.1 | 0.2 | 0.2 | 14.7 | 2703.3 -5.2 |
| 174 | 0101 0010 | 2678.75 | 2722.5 | -3.2 | 1.0 | 24.4 | 2719.2 3.3 |
| 175 | 0101 0001 | 2694.38 | 2739.7 | -0.3 | -0.0 | 17.3 | 2735.1 4.7 |
| 176 | 0101 0000 | 2710.00 | 2752.8 | -1.0 | -1.0 | 13.1 | 2750.9 1.9 |
| 177 | 0100 1111 | 2725.63 | 2758.9 | 0.1 | 0.2 | 6.1 | 2766.8 -7.9 |
| 178 | 0100 1110 | 2741.25 | 2774.9 | 0.7 | 0.8 | 16.0 | 2782.7 -7.3 |
| 179 | 0100 1101 | 2756.88 | 2800.2 | 0.3 | 0.3 | 25.2 | 2798.6 1.6 |
| 180 | 0100 1100 | 2772.50 | 2810.0 | -0.1 | -0.1 | 9.8 | 2814.4 -4.4 |
| 181 | 0100 1011 | 2788.13 | 2824.5 | -0.2 | -0.3 | 14.5 | 2830.3 -5.8 |
| 182 | 0100 1010 | 2803.75 | 2846.0 | 1.0 | -0.0 | 21.5 | 2846.2 -0.1 |
| 183 | 0100 1001 | 2819.38 | 2865.7 | 0.1 | 0.0 | 19.6 | 2862.1 3.6 |

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HS-236 THERMATIC MATTER MIX UNIT TEST MODEL 111 S/N 3 PAGE 152
 1981/12/01 09:11:50 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

| THRESHOLD
NUMBER | A/D
THRESHOLD | OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
GAIN RATIO = 1:1
NOMINAL LOWER HIGHER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT DEVIATION | | | |
|---------------------|------------------|---------------------|------------------------|---|------------------------------------|---|------|--------|------|
| 184 | 0100 | 1000 | 2835.00 | 2880.3 | 0.2 | 0.4 | 14.6 | 2827.9 | 2.3 |
| 185 | 0100 | 0111 | 2850.63 | 2885.4 | 0.2 | -0.3 | 5.1 | 2893.8 | -8.4 |
| 186 | 0100 | 0110 | 2866.25 | 2904.5 | -0.4 | 0.4 | 19.0 | 2909.7 | -5.2 |
| 187 | 0100 | 0101 | 2881.88 | 2926.7 | 0.1 | 0.1 | 22.7 | 2925.6 | 1.1 |
| 188 | 0100 | 0100 | 2897.50 | 2939.1 | 0.3 | 0.2 | 12.4 | 2941.4 | -2.4 |
| 189 | 0100 | 0011 | 2913.13 | 2951.0 | -0.3 | -0.0 | 11.9 | 2957.3 | -6.3 |
| 190 | 0100 | 0010 | 2928.75 | 2972.4 | -1.4 | -1.4 | 21.4 | 2971.2 | -0.8 |
| 191 | 0100 | 0001 | 2944.38 | 2992.4 | -0.1 | 0.3 | 20.0 | 2989.1 | 3.4 |
| 192 | 0100 | 0000 | 2960.00 | 3005.7 | 0.8 | 0.9 | 13.3 | 3004.9 | 0.8 |
| 193 | 0011 | 1111 | 2975.63 | 3014.5 | -0.0 | 0.2 | 8.8 | 3020.8 | -6.3 |
| 194 | 0011 | 1110 | 2991.25 | 3031.0 | -1.3 | -1.3 | 16.5 | 3036.7 | -5.6 |
| 195 | 0011 | 1101 | 3006.88 | 3057.0 | 0.1 | -0.0 | 25.9 | 3052.5 | 4.4 |
| 196 | 0011 | 1100 | 3022.50 | 3062.0 | 0.2 | -0.0 | 5.9 | 3068.4 | -6.4 |
| 197 | 0011 | 1011 | 3038.13 | 3080.5 | 0.2 | 0.3 | 18.5 | 3084.3 | -3.8 |
| 198 | 0011 | 1010 | 3053.75 | 3101.1 | -0.1 | 0.3 | 20.6 | 3100.2 | 0.9 |
| 199 | 0011 | 1001 | 3069.38 | 3123.0 | -0.2 | -0.2 | 21.9 | 3116.0 | 5.9 |
| 200 | 0011 | 1000 | 3085.00 | 3127.5 | 0.0 | -1.3 | 4.5 | 3131.9 | -4.5 |
| 201 | 0011 | 0111 | 3100.63 | 3141.7 | 0.2 | 0.1 | 14.3 | 3147.8 | -6.1 |
| 202 | 0011 | 0110 | 3116.25 | 3159.3 | 1.2 | 1.3 | 17.6 | 3163.7 | -9.4 |
| 203 | 0011 | 0101 | 3131.88 | 3184.3 | -0.1 | -0.0 | 25.0 | 3179.5 | 4.8 |
| 204 | 0011 | 0100 | 3147.50 | 3191.8 | -0.5 | -0.4 | 7.5 | 3195.4 | -3.6 |
| 205 | 0011 | 0011 | 3163.13 | 3208.0 | -0.1 | -0.3 | 16.2 | 3211.3 | -3.3 |
| 206 | 0011 | 0010 | 3178.75 | 3227.4 | 1.0 | 1.1 | 19.4 | 3227.2 | 0.3 |
| 207 | 0011 | 0001 | 3194.38 | 3250.0 | 0.0 | 0.2 | 22.5 | 3243.0 | 6.9 |
| 208 | 0011 | 0000 | 3210.00 | 3255.2 | -1.1 | -1.1 | 5.2 | 3258.9 | -3.7 |
| 209 | 0010 | 1111 | 3225.63 | 3269.0 | -0.2 | -0.1 | 13.8 | 3274.8 | -5.8 |

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HS-236 THERMATIC MAPPER MIX UNIT TEST MODEL 11 FLT. S/N 3 PAGE 154

1981/12/01 09:11:50 FINALLY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



| FIRE SHIELD
NUMBER | A/D OUTPUT
FIRE SHIELD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE
(MV) | | INCREASE
FROM PREV
FIRE SHIELD | BEST FIT STRAIGHT LINE | |
|-----------------------|---------------------------|------------------------|------------------------------|-------|--------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | | POINT | DEVIATION |
| 237 | 0001 0011 | 3663.13 | 3718.3 | 0.4 | -0.4 | 3719.2 | -1.0 |
| 238 | 0001 0010 | 3628.75 | 3741.2 | -3.0 | 0.1 | 3735.1 | 6.1 |
| 239 | 0001 0001 | 3694.38 | 3760.7 | 0.1 | 0.4 | 3751.0 | 9.7 |
| 240 | 0001 0000 | 3710.00 | 3767.2 | -0.7 | 0.5 | 3766.9 | 0.3 |
| 241 | 0000 1111 | 3725.63 | 3780.0 | -0.4 | 0.4 | 3782.7 | -2.7 |
| 242 | 0000 1110 | 3741.25 | 3796.2 | -0.1 | -1.3 | 3798.6 | -2.5 |
| 243 | 0000 1101 | 3756.88 | 3814.3 | 1.0 | 1.0 | 3814.5 | -0.2 |
| 244 | 0000 1100 | 3772.50 | 3830.1 | 0.1 | 0.4 | 3830.4 | -0.3 |
| 245 | 0000 1011 | 3788.13 | 3846.8 | -0.5 | 0.0 | 3846.2 | 0.5 |
| 246 | 0000 1010 | 3803.75 | 3868.5 | -0.9 | -0.8 | 3862.1 | 6.4 |
| 247 | 0000 1001 | 3819.38 | 3883.0 | -0.1 | 0.9 | 3878.0 | 5.0 |
| 248 | 0000 1000 | 3835.00 | 3903.4 | 0.4 | 0.6 | 3893.9 | 9.4 |
| 249 | 0000 0111 | 3850.63 | 3908.2 | 0.0 | 0.6 | 3909.7 | -1.6 |
| 250 | 0000 0110 | 3866.25 | 3927.2 | -1.5 | 1.4 | 3925.6 | 1.6 |
| 251 | 0000 0101 | 3881.88 | 3944.1 | -0.7 | -0.6 | 3941.5 | 2.6 |
| 252 | 0000 0100 | 3897.50 | 3961.3 | 0.4 | 0.0 | 3967.4 | 4.0 |
| 253 | 0000 0011 | 3913.13 | 3974.8 | 0.5 | 0.6 | 3973.2 | 1.6 |
| 254 | 0000 0010 | 3928.75 | 3994.6 | -0.1 | 1.4 | 3989.1 | 5.5 |
| 255 | 0000 0001 | 3944.38 | 4018.2 | 0.5 | -0.3 | 4005.0 | 13.2 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL... 111. S/N 3 PAGE 158

1981/12/01 09:18:27 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

527

000181

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 52 | 1100 1100 | 772.500 | 785.6 | -0.1 | 0.1 | 14.9 | 784.7 | 0.9 |
| 53 | 1100 1011 | 788.125 | 800.1 | 0.2 | 0.1 | 14.5 | 800.6 | -0.4 |
| 54 | 1100 1010 | 803.750 | 817.9 | 0.0 | 0.0 | 17.7 | 816.4 | 1.4 |
| 55 | 1100 1001 | 819.375 | 836.7 | -0.3 | -0.2 | 18.9 | 832.3 | 4.4 |
| 56 | 1100 1000 | 835.000 | 853.0 | 0.1 | 0.1 | 16.2 | 848.2 | 4.8 |
| 57 | 1100 0111 | 850.625 | 861.2 | 0.0 | -0.1 | 8.2 | 864.1 | -2.9 |
| 58 | 1100 0110 | 866.250 | 879.0 | -0.1 | 0.0 | 12.8 | 879.9 | -0.9 |
| 59 | 1100 0101 | 881.875 | 897.3 | -0.0 | 0.2 | 18.3 | 895.8 | 1.5 |
| 60 | 1100 0100 | 897.500 | 916.1 | -0.5 | -0.5 | 18.7 | 911.7 | 4.4 |
| 61 | 1100 0011 | 913.125 | 926.8 | -0.1 | -0.1 | 10.8 | 927.5 | -0.7 |
| 62 | 1100 0010 | 928.750 | 947.0 | -0.1 | -0.1 | 20.2 | 943.4 | 3.6 |
| 63 | 1100 0001 | 944.375 | 962.6 | 0.1 | 0.1 | 15.6 | 959.3 | 3.4 |
| 64 | 1100 0000 | 960.000 | 978.8 | -0.1 | -0.1 | 16.2 | 975.2 | 3.7 |
| | | | | | | | | |
| 65 | 1011 1111 | 975.625 | 990.4 | -0.3 | -0.3 | 11.6 | 991.0 | -0.6 |
| 66 | 1011 1110 | 991.250 | 1005.1 | -0.1 | 0.1 | 14.7 | 1006.9 | -1.8 |
| 67 | 1011 1101 | 1006.88 | 1026.1 | 0.2 | 0.2 | 21.0 | 1027.8 | 3.3 |
| 68 | 1011 1100 | 1022.50 | 1037.3 | 0.1 | 0.1 | 11.2 | 1038.6 | -1.4 |
| 69 | 1011 1011 | 1038.13 | 1056.2 | -0.3 | -0.1 | 18.9 | 1054.5 | 1.6 |
| 70 | 1011 1010 | 1053.75 | 1075.2 | -2.9 | 0.1 | 19.0 | 1070.4 | 4.8 |
| 71 | 1011 1001 | 1069.38 | 1095.6 | 0.0 | -0.2 | 20.4 | 1086.3 | 9.3 |
| 72 | 1011 1000 | 1085.00 | 1100.7 | -0.2 | -0.2 | 5.0 | 1102.1 | -1.5 |
| 73 | 1011 0111 | 1100.63 | 1116.8 | 0.0 | 0.1 | 16.1 | 1118.0 | -1.2 |
| 74 | 1011 0110 | 1116.25 | 1133.9 | 0.2 | 0.2 | 17.0 | 1133.9 | -0.0 |
| 75 | 1011 0101 | 1131.88 | 1152.6 | -0.2 | 0.1 | 18.7 | 1149.7 | 2.9 |
| 76 | 1011 0100 | 1147.50 | 1167.6 | 0.1 | -0.1 | 15.0 | 1165.6 | 2.0 |
| 77 | 1011 0011 | 1163.13 | 1182.4 | 0.2 | 0.2 | 14.8 | 1181.5 | 0.9 |
| 78 | 1011 0010 | 1178.75 | 1201.9 | 0.0 | -0.2 | 19.5 | 1197.4 | 4.6 |

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OF POOR QUALITY

110

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0.5.1.1.1) N/D 1-HzFS-HH D TEST (BAND= 5, SENSOR=15)
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DEL 01 '00

| | | | | | | | | | |
|-----|------|------|---------|--------|------|------|------|--------|------|
| 79 | 1011 | 0001 | 1194.38 | 1218.0 | 0.1 | 0.0 | 16.0 | 1213.2 | 4.8 |
| 80 | 1011 | 0000 | 1210.00 | 1229.5 | -0.0 | 0.0 | 11.5 | 1229.1 | 0.4 |
| 81 | 1010 | 1111 | 1225.63 | 1243.0 | 0.1 | 0.1 | 13.4 | 1245.0 | -2.0 |
| 82 | 1010 | 1110 | 1241.25 | 1258.1 | -0.1 | -0.1 | 15.1 | 1260.8 | -2.8 |
| 83 | 1010 | 1101 | 1256.88 | 1273.6 | -0.1 | -0.1 | 20.5 | 1276.7 | 1.9 |
| 84 | 1010 | 1100 | 1272.50 | 1292.7 | -0.2 | -0.2 | 14.1 | 1292.6 | 0.1 |
| 85 | 1010 | 1011 | 1288.13 | 1308.7 | 0.1 | -0.3 | 15.9 | 1308.5 | 0.2 |
| 86 | 1010 | 1010 | 1303.75 | 1325.4 | -0.1 | -0.1 | 16.7 | 1324.3 | 1.0 |
| 87 | 1010 | 1001 | 1319.38 | 1344.0 | 0.0 | 0.1 | 18.7 | 1340.2 | 3.8 |
| 88 | 1010 | 1000 | 1335.00 | 1361.0 | 0.1 | 0.1 | 17.0 | 1356.1 | 5.0 |
| 89 | 1010 | 0111 | 1350.63 | 1369.3 | -0.0 | 0.0 | 8.2 | 1371.9 | -2.7 |
| 90 | 1010 | 0110 | 1366.25 | 1386.6 | -0.0 | 0.0 | 17.3 | 1387.8 | -1.2 |
| 91 | 1010 | 0101 | 1381.88 | 1404.6 | 0.1 | 0.1 | 18.0 | 1403.7 | 0.9 |
| 92 | 1010 | 0100 | 1397.50 | 1422.2 | -0.1 | 0.0 | 17.6 | 1419.6 | 2.7 |
| 93 | 1010 | 0011 | 1413.13 | 1434.8 | -0.2 | -0.2 | 12.6 | 1435.4 | -0.6 |
| 94 | 1010 | 0010 | 1428.75 | 1454.6 | 0.0 | 0.1 | 19.8 | 1451.3 | 3.3 |
| 95 | 1010 | 0001 | 1444.38 | 1470.1 | 0.0 | 0.0 | 15.5 | 1467.2 | 3.0 |
| 96 | 1010 | 0000 | 1460.00 | 1484.3 | -0.3 | -0.3 | 14.2 | 1483.0 | 1.3 |
| 97 | 1001 | 1111 | 1475.63 | 1494.2 | 0.0 | -0.0 | 9.8 | 1498.9 | -4.8 |
| 98 | 1001 | 1110 | 1491.25 | 1508.2 | 0.1 | 0.0 | 14.0 | 1514.8 | -6.6 |
| 99 | 1001 | 1101 | 1506.88 | 1530.1 | 0.1 | -0.1 | 21.9 | 1530.7 | -0.5 |
| 100 | 1001 | 1100 | 1522.50 | 1540.6 | 0.1 | 0.0 | 10.4 | 1546.5 | -6.0 |
| 101 | 1001 | 1011 | 1538.13 | 1559.8 | 0.0 | 0.1 | 19.2 | 1562.4 | -2.6 |
| 102 | 1001 | 1010 | 1553.75 | 1575.1 | 0.1 | 0.2 | 15.3 | 1578.3 | -3.2 |
| 103 | 1001 | 1001 | 1569.38 | 1595.2 | -0.1 | -0.1 | 20.1 | 1594.1 | 1.1 |
| 104 | 1001 | 1000 | 1585.00 | 1606.5 | -0.2 | 0.0 | 11.3 | 1610.0 | -3.5 |

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OF FOUR QUALITY

HS-236 THERMATIC MAPPER MUX UNIT TEST MODEL... FL1, S/N 3 PAGE 160

1981/12/01 09:18:27 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

SENDER=123

| THRESHOLD AND OUTPUT
NUMBER | THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--------------------------------|-----------|------------------------|---------------------------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1620.5 | 0.1 | 0.2 | 1620.9 | -5.4 |
| 106 | 1001 0110 | 1616.25 | 1637.0 | 0.1 | -0.0 | 1641.8 | -4.7 |
| 107 | 1001 0101 | 1631.88 | 1655.8 | -0.1 | -0.1 | 1657.6 | -1.8 |
| 108 | 1001 0100 | 1647.50 | 1670.2 | 0.0 | -0.1 | 1673.5 | -3.3 |
| 109 | 1001 0011 | 1663.13 | 1685.8 | 0.0 | 0.0 | 1689.4 | -3.6 |
| 110 | 1001 0010 | 1678.75 | 1704.7 | -0.1 | -0.1 | 1705.2 | -0.5 |
| 111 | 1001 0001 | 1694.38 | 1721.3 | 0.0 | 0.0 | 1721.1 | 0.2 |
| 112 | 1001 0000 | 1710.00 | 1735.4 | 0.0 | 0.0 | 1737.0 | -1.6 |
| 113 | 1000 1111 | 1725.63 | 1746.5 | 0.0 | -0.5 | 1752.9 | -6.3 |
| 114 | 1000 1110 | 1741.25 | 1761.2 | -0.2 | 0.2 | 1768.7 | -7.5 |
| 115 | 1000 1101 | 1756.88 | 1782.2 | 0.0 | 0.0 | 1784.6 | -2.4 |
| 116 | 1000 1100 | 1772.50 | 1795.8 | 0.0 | -0.0 | 1800.5 | -4.6 |
| 117 | 1000 1011 | 1788.13 | 1812.0 | -0.1 | 0.1 | 1816.3 | -4.4 |
| 118 | 1000 1010 | 1803.75 | 1827.9 | -0.2 | 0.0 | 1832.2 | -4.3 |
| 119 | 1000 1001 | 1819.38 | 1847.2 | 0.2 | 0.1 | 1848.1 | -0.9 |
| 120 | 1000 1000 | 1835.00 | 1863.7 | 0.1 | 0.0 | 1864.0 | -0.3 |
| 121 | 1000 0111 | 1850.63 | 1872.8 | -0.1 | -0.1 | 1879.8 | -7.0 |
| 122 | 1000 0110 | 1866.25 | 1889.4 | 0.1 | 0.1 | 1895.7 | -6.3 |
| 123 | 1000 0101 | 1881.88 | 1907.9 | 0.0 | 0.1 | 1911.6 | -3.7 |
| 124 | 1000 0100 | 1897.50 | 1925.1 | 0.2 | 0.1 | 1927.4 | -2.3 |
| 125 | 1000 0011 | 1913.13 | 1937.9 | 0.0 | 0.0 | 1943.3 | -5.4 |
| 126 | 1000 0010 | 1928.75 | 1957.2 | 0.1 | 0.1 | 1959.2 | -2.0 |
| 127 | 1000 0001 | 1944.38 | 1973.3 | 0.0 | -0.0 | 1975.1 | -1.8 |
| 128 | 1000 0000 | 1960.00 | 1996.5 | -0.0 | -0.9 | 1990.9 | 5.6 |
| 129 | 0111 1111 | 1975.63 | 2005.5 | 0.0 | -0.0 | 2006.8 | -1.3 |
| 130 | 0111 1110 | 1991.25 | 2021.4 | 0.2 | 0.3 | 2022.7 | -1.3 |

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HS-236 THERMATIC MAPPER MIX UNIT TEST MODEL 1, LOT. S/N 3 PAGE 143

1981/12/01 09:18:27 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

THRESHOLD AND OUTPUT VALUES ANALOG INPUT VOLTAGE (MV) INCREASE FROM PREV THRESHOLD BEST FIT STRAIGHT LINE POINT DEVIATION

| THRESHOLD
NUMBER | AND
THRESHOLD | OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG
INPUT VOLTAGE
(MV) | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT
DEVIATION | | | |
|---------------------|------------------|---------------------|------------------------|---------------------------------|------------------------------------|--|------|--------|------|
| | | | NOMINAL | LOWER | UPPER | | | | |
| 184 | 0100 | 1000 | 2835.00 | 2883.9 | -0.4 | -0.4 | 21.1 | 2879.7 | 4.1 |
| 185 | 0100 | 0111 | 2850.63 | 2888.9 | 0.0 | -0.0 | 5.1 | 2895.6 | -6.7 |
| 186 | 0100 | 0110 | 2864.25 | 2906.5 | 0.5 | 0.4 | 12.6 | 2911.5 | -4.9 |
| 187 | 0100 | 0101 | 2881.88 | 2923.6 | -0.0 | 0.0 | 17.1 | 2927.3 | -3.7 |
| 188 | 0100 | 0100 | 2897.50 | 2943.0 | -0.1 | 0.0 | 19.3 | 2943.2 | -0.2 |
| 189 | 0100 | 0011 | 2913.13 | 2954.4 | -0.2 | 0.1 | 11.4 | 2959.1 | -4.7 |
| 190 | 0100 | 0010 | 2928.75 | 2974.2 | 0.2 | 0.0 | 19.8 | 2975.0 | -0.7 |
| 191 | 0100 | 0001 | 2944.38 | 2989.5 | 0.1 | 0.2 | 15.3 | 2990.8 | -1.3 |
| 192 | 0100 | 0000 | 2960.00 | 3009.7 | 0.0 | 0.3 | 20.2 | 3006.7 | 3.0 |
| 193 | 0011 | 1111 | 2975.63 | 3018.3 | -0.3 | -0.2 | 8.6 | 3022.6 | -4.3 |
| 194 | 0011 | 1110 | 2991.25 | 3033.9 | -0.3 | -0.3 | 15.6 | 3038.4 | -4.6 |
| 195 | 0011 | 1101 | 3006.88 | 3053.3 | 0.1 | 0.0 | 19.4 | 3054.3 | -1.0 |
| 196 | 0011 | 1100 | 3022.50 | 3066.0 | 0.1 | 0.2 | 12.7 | 3070.2 | -4.2 |
| 197 | 0011 | 1011 | 3038.13 | 3084.4 | -0.3 | 0.1 | 18.4 | 3086.1 | -1.6 |
| 198 | 0011 | 1010 | 3053.75 | 3104.6 | -0.4 | 0.2 | 20.2 | 3101.9 | 2.7 |
| 199 | 0011 | 1001 | 3069.38 | 3119.7 | -0.2 | -0.3 | 15.1 | 3117.8 | 1.9 |
| 200 | 0011 | 1000 | 3085.00 | 3129.2 | 0.4 | 0.4 | 9.5 | 3139.7 | -4.5 |
| 201 | 0011 | 0111 | 3100.63 | 3145.5 | 0.1 | 0.1 | 16.3 | 3149.5 | -4.0 |
| 202 | 0011 | 0110 | 3116.25 | 3163.3 | 0.5 | 0.1 | 17.8 | 3165.4 | -2.1 |
| 203 | 0011 | 0101 | 3131.88 | 3180.8 | -0.5 | -0.5 | 17.4 | 3181.3 | -0.5 |
| 204 | 0011 | 0100 | 3147.50 | 3195.6 | -0.1 | -0.0 | 14.8 | 3197.2 | -1.6 |
| 205 | 0011 | 0011 | 3163.13 | 3211.5 | 0.0 | 0.0 | 16.0 | 3213.0 | -1.5 |
| 206 | 0011 | 0010 | 3178.75 | 3230.8 | -0.2 | 0.3 | 19.4 | 3228.9 | 1.9 |
| 207 | 0011 | 0001 | 3194.38 | 3247.1 | -0.2 | -0.2 | 16.3 | 3244.8 | 2.3 |
| 208 | 0011 | 0000 | 3210.00 | 3265.0 | 0.1 | 0.0 | 17.9 | 3260.6 | 4.4 |
| 209 | 0010 | 1111 | 3225.63 | 3272.6 | 0.2 | -0.0 | 7.6 | 3276.5 | -3.9 |

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| THRESHOLD
NUMBER | A/D
THRESHOLD | ANALOG
VALUE
(MV) | ANALOG INPUT VOLTAGE
LEVELS RATIO= | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | |
|---------------------|------------------|-------------------------|---------------------------------------|-------|------------------------------------|------------------------|-----------|------|
| | | | NOMINAL | LOWER | | POINT | DEVIATION | |
| 210 | 0010 1110 | 3241.25 | 3282.3 | 1.1 | 1.1 | 14.6 | 3292.4 | -5.1 |
| 211 | 0010 1101 | 3256.88 | 3307.7 | 0.2 | -0.0 | 20.4 | 3308.3 | -0.5 |
| 212 | 0010 1100 | 3272.50 | 3323.2 | -0.1 | -0.0 | 15.4 | 3324.1 | -1.0 |
| 213 | 0010 1011 | 3288.13 | 3338.7 | 0.0 | 0.0 | 15.5 | 3340.0 | -1.3 |
| 214 | 0010 1010 | 3303.75 | 3355.5 | 0.1 | 4.9 | 16.9 | 3355.9 | -0.3 |
| 215 | 0010 1001 | 3319.38 | 3373.8 | 0.0 | 0.0 | 18.3 | 3371.7 | 2.1 |
| 216 | 0010 1000 | 3335.00 | 3391.1 | -0.5 | 0.0 | 17.3 | 3387.6 | 3.5 |
| 217 | 0010 0111 | 3350.63 | 3400.5 | 0.2 | -0.2 | 9.4 | 3403.5 | -3.0 |
| 218 | 0010 0110 | 3366.25 | 3418.0 | 0.2 | 0.0 | 17.5 | 3419.4 | -1.4 |
| 219 | 0010 0101 | 3381.88 | 3435.0 | 0.3 | 0.4 | 17.0 | 3435.2 | -0.2 |
| 220 | 0010 0100 | 3397.50 | 3453.3 | 0.2 | 0.2 | 18.3 | 3451.1 | 2.2 |
| 221 | 0010 0011 | 3413.13 | 3466.4 | -0.0 | 0.0 | 13.0 | 3467.0 | -0.6 |
| 222 | 0010 0010 | 3428.75 | 3486.5 | -0.6 | -0.4 | 20.1 | 3482.8 | 3.6 |
| 223 | 0010 0001 | 3444.38 | 3501.9 | 0.1 | -0.0 | 15.4 | 3498.7 | 3.2 |
| 224 | 0010 0000 | 3450.00 | 3518.2 | 0.3 | 9.5 | 16.3 | 3514.6 | 3.6 |
| 225 | 0001 1111 | 3475.63 | 3530.8 | 0.4 | 0.0 | 12.6 | 3530.5 | 0.3 |
| 226 | 0001 1110 | 3491.25 | 3541.2 | 0.0 | 0.0 | 10.4 | 3544.3 | -5.1 |
| 227 | 0001 1101 | 3506.88 | 3561.9 | -0.1 | -0.1 | 20.7 | 3562.2 | -0.3 |
| 228 | 0001 1100 | 3522.50 | 3574.5 | 0.0 | 0.0 | 12.6 | 3578.1 | -3.6 |
| 229 | 0001 1011 | 3538.13 | 3593.7 | -0.1 | -0.0 | 19.2 | 3593.9 | -0.2 |
| 230 | 0001 1010 | 3553.75 | 3613.6 | -0.6 | 0.0 | 19.9 | 3609.8 | 3.8 |
| 231 | 0001 1001 | 3569.38 | 3628.7 | 0.1 | -0.1 | 15.0 | 3625.7 | 3.0 |
| 232 | 0001 1000 | 3585.00 | 3640.7 | 0.1 | 0.0 | 12.0 | 3641.6 | -0.9 |
| 233 | 0001 0111 | 3600.63 | 3655.2 | 0.0 | -0.0 | 14.6 | 3657.4 | -2.2 |
| 234 | 0001 0110 | 3616.25 | 3672.1 | -0.0 | 0.4 | 16.8 | 3673.3 | -1.2 |
| 235 | 0001 0101 | 3631.88 | 3690.2 | -0.3 | -0.1 | 18.1 | 3689.2 | 1.0 |
| 236 | 0001 0100 | 3647.50 | 3705.3 | -0.1 | -0.0 | 15.0 | 3705.0 | 0.2 |

HS-236 THERMATIC MAPPER MUX UNIT TEST MODEL . . FLT. S/N 3 PAGE 145

1981/12/01 09:18:27 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST # 21.12-11 Q/D D-THERMISTOR IN D-THERMISTOR (1-2-3) == 15 - SENSITIVITY = 1.5

| THRESHOLD
NUMBER | A/D
THRESHOLD | OUTPUT
THRESHOLD | IDEAL
VALUE
(mV) | ANALOG INPUT VOLTAGE (mV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|------------------|---------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 237 | 0001 | 0011 | 3663.13 | 3721.7 | 0.2 | 0.1 | 16.4 | 3720.9 | 0.8 |
| 238 | 0001 | 0010 | 3678.75 | 3740.5 | 0.2 | 0.3 | 18.8 | 3734.8 | 3.7 |
| 239 | 0001 | 0001 | 3694.38 | 3757.1 | 0.3 | -0.0 | 16.6 | 3752.7 | 4.5 |
| 240 | 0001 | 0000 | 3710.00 | 3771.8 | -0.3 | -0.3 | 14.6 | 3768.5 | 3.2 |
| 241 | 0000 | 1111 | 3725.63 | 3787.4 | 0.0 | -0.3 | 15.6 | 3784.4 | 3.0 |
| 242 | 0000 | 1110 | 3741.25 | 3798.6 | 0.1 | 0.4 | 11.2 | 3800.3 | -1.7 |
| 243 | 0000 | 1101 | 3756.88 | 3818.3 | 0.2 | 0.2 | 19.7 | 3816.1 | 2.2 |
| 244 | 0000 | 1100 | 3772.50 | 3834.3 | -0.6 | 0.0 | 15.9 | 3832.0 | 2.2 |
| 245 | 0000 | 1011 | 3788.13 | 3850.4 | -0.6 | -0.1 | 16.1 | 3847.9 | 2.5 |
| 246 | 0000 | 1010 | 3803.75 | 3866.7 | 0.4 | 0.0 | 16.3 | 3863.8 | 2.9 |
| 247 | 0000 | 1001 | 3819.38 | 3885.1 | 0.0 | 0.0 | 18.4 | 3879.6 | 5.5 |
| 248 | 0000 | 1000 | 3835.00 | 3902.0 | -0.1 | 0.1 | 16.9 | 3895.5 | 6.5 |
| 249 | 0000 | 0111 | 3850.63 | 3912.6 | -0.6 | -0.2 | 10.6 | 3911.4 | 1.2 |
| 250 | 0000 | 0110 | 3866.25 | 3929.7 | -0.2 | -0.1 | 17.1 | 3927.2 | 2.5 |
| 251 | 0000 | 0101 | 3881.88 | 3947.1 | -0.5 | -0.0 | 17.4 | 3943.1 | 4.0 |
| 252 | 0000 | 0100 | 3897.50 | 3965.4 | 0.1 | 0.4 | 18.3 | 3959.0 | 6.4 |
| 253 | 0000 | 0011 | 3913.13 | 3978.9 | -0.1 | -0.0 | 13.5 | 3974.9 | 4.1 |
| 254 | 0000 | 0010 | 3928.75 | 3998.7 | -0.7 | -0.4 | 19.7 | 3990.7 | 7.9 |
| 255 | 0000 | 0001 | 3944.38 | 4014.3 | 0.0 | 0.0 | 15.6 | 4006.6 | 7.7 |

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HS-236 THETAC MAFER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 169

1981/12/01 09:25:04 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST = 100% TEST = 100% TEST = 100% TEST = 100% TEST = 100% TEST = 100% TEST = 100% TEST = 100% TEST = 100% TEST = 100%

| THRESHOLD
NUMBER | A/D
THRESHOLD | A/D
OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|------------------|----------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 52 | 1100 | 1100 | 772.500 | 783.9 | -0.5 | -0.5 | 15.6 | 782.8 | 1.2 |
| 53 | 1100 | 1011 | 788.125 | 797.9 | -0.0 | -0.2 | 14.0 | 798.6 | -0.7 |
| 54 | 1100 | 1010 | 803.750 | 816.1 | 0.1 | 0.1 | 18.1 | 814.5 | 1.6 |
| 55 | 1100 | 1001 | 819.375 | 834.0 | -0.0 | 0.1 | 17.9 | 830.4 | 3.6 |
| 56 | 1100 | 1000 | 835.000 | 854.8 | -0.4 | -0.3 | 20.8 | 846.3 | 8.5 |
| 57 | 1100 | 0111 | 850.625 | 858.9 | -0.2 | -0.2 | 4.1 | 862.1 | -3.3 |
| 58 | 1100 | 0110 | 866.250 | 877.1 | -0.0 | 0.0 | 18.2 | 878.0 | -1.0 |
| 59 | 1100 | 0101 | 881.875 | 895.1 | 0.1 | 0.1 | 18.0 | 893.9 | 1.2 |
| 60 | 1100 | 0100 | 897.500 | 914.0 | 0.0 | 0.2 | 18.9 | 909.8 | 4.2 |
| 61 | 1100 | 0011 | 913.125 | 924.5 | -0.1 | -0.2 | 10.5 | 925.6 | -1.1 |
| 62 | 1100 | 0010 | 928.750 | 945.1 | -0.0 | 0.1 | 20.6 | 941.5 | 3.6 |
| 63 | 1100 | 0001 | 944.375 | 960.6 | -0.0 | -0.0 | 15.5 | 957.4 | 3.2 |
| 64 | 1100 | 0000 | 960.000 | 976.6 | 0.4 | 0.3 | 15.9 | 973.3 | 3.3 |
| 65 | 1011 | 1111 | 975.625 | 988.0 | -0.1 | 0.0 | 11.4 | 989.2 | -1.2 |
| 66 | 1011 | 1110 | 991.250 | 1003.2 | -0.1 | -0.0 | 15.2 | 1005.0 | -1.9 |
| 67 | 1011 | 1101 | 1006.875 | 1023.8 | 0.0 | -0.3 | 20.6 | 1020.9 | 2.9 |
| 68 | 1011 | 1100 | 1022.500 | 1035.3 | 0.3 | 0.4 | 11.5 | 1036.8 | -1.5 |
| 69 | 1011 | 1011 | 1038.125 | 1053.6 | 0.0 | 0.1 | 18.3 | 1052.7 | 0.9 |
| 70 | 1011 | 1010 | 1053.750 | 1073.8 | -0.4 | -0.4 | 20.2 | 1068.5 | 5.2 |
| 71 | 1011 | 1001 | 1069.375 | 1089.8 | -0.2 | 0.2 | 16.0 | 1084.4 | 5.4 |
| 72 | 1011 | 1000 | 1085.000 | 1098.9 | 0.0 | 0.0 | 9.1 | 1100.3 | -1.4 |
| 73 | 1011 | 0111 | 1100.625 | 1114.5 | 0.2 | 0.2 | 15.6 | 1116.2 | -1.7 |
| 74 | 1011 | 0110 | 1116.250 | 1132.1 | -0.0 | -0.0 | 17.5 | 1132.0 | 0.0 |
| 75 | 1011 | 0101 | 1131.875 | 1150.3 | -0.2 | -0.2 | 18.3 | 1147.9 | 2.4 |
| 76 | 1011 | 0100 | 1147.500 | 1166.1 | 0.0 | 2.2 | 15.8 | 1163.8 | 2.3 |
| 77 | 1011 | 0011 | 1163.125 | 1180.1 | 0.1 | 0.1 | 14.0 | 1179.7 | 0.4 |
| 78 | 1011 | 0010 | 1178.750 | 1199.9 | 0.2 | 0.2 | 19.8 | 1195.6 | 4.4 |

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HS-236 DYNAMIC MAPPER MUX UNIT TEST MODEL: 111, S/N 3 PAGE 171

1981/12/01 09:25:04 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TESTS: 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130



| TEST SHOT
NUMBER | A/D OUTPUT
THRESHOLD | TOTAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | (NO)
1:1
UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-----------------------|----------------------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO
LOWER | | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1618.3 | 0.1 | 0.1 | 13.3 | 1624.2 | -6.0 |
| 106 | 1001 0110 | 1616.25 | 1635.1 | 0.1 | 0.1 | 16.8 | 1640.1 | -5.0 |
| 107 | 1001 0101 | 1631.88 | 1653.7 | -0.1 | -0.0 | 18.6 | 1656.0 | -2.3 |
| 108 | 1001 0100 | 1647.50 | 1669.5 | -1.5 | -1.5 | 15.8 | 1671.9 | -2.4 |
| 109 | 1001 0011 | 1663.13 | 1683.7 | 0.2 | -0.1 | 14.2 | 1687.7 | -4.0 |
| 110 | 1001 0010 | 1678.75 | 1702.7 | 0.4 | 0.4 | 19.0 | 1703.6 | -0.9 |
| 111 | 1001 0001 | 1694.38 | 1719.2 | 0.0 | 0.0 | 16.5 | 1719.5 | -0.3 |
| 112 | 1001 0000 | 1710.00 | 1739.6 | -0.5 | -0.6 | 20.3 | 1735.4 | 4.2 |
| 113 | 1000 1111 | 1725.63 | 1744.5 | -0.3 | -0.3 | 4.9 | 1751.2 | -6.8 |
| 114 | 1000 1110 | 1741.25 | 1759.2 | -0.0 | -0.0 | 14.7 | 1767.1 | -7.9 |
| 115 | 1000 1101 | 1756.88 | 1780.0 | 0.2 | 0.2 | 20.8 | 1783.0 | -3.0 |
| 116 | 1000 1100 | 1772.50 | 1794.4 | -0.5 | 0.1 | 14.3 | 1798.9 | -4.5 |
| 117 | 1000 1011 | 1788.13 | 1809.9 | -0.2 | -0.2 | 15.5 | 1814.8 | -4.9 |
| 118 | 1000 1010 | 1803.75 | 1826.1 | 0.0 | -0.3 | 16.2 | 1830.6 | -4.6 |
| 119 | 1000 1001 | 1819.38 | 1845.0 | 0.2 | 0.2 | 18.9 | 1846.5 | -1.5 |
| 120 | 1000 1000 | 1835.00 | 1866.0 | 0.4 | -0.9 | 21.0 | 1862.4 | 3.6 |
| 121 | 1000 0111 | 1850.63 | 1870.5 | -0.3 | -0.1 | 4.6 | 1878.3 | -7.7 |
| 122 | 1000 0110 | 1866.25 | 1887.3 | 0.1 | -0.0 | 16.8 | 1894.1 | -6.8 |
| 123 | 1000 0101 | 1881.88 | 1905.5 | 0.2 | -0.1 | 18.2 | 1910.0 | -4.5 |
| 124 | 1000 0100 | 1897.50 | 1923.3 | 0.3 | 0.3 | 17.8 | 1925.9 | -2.6 |
| 125 | 1000 0011 | 1913.13 | 1935.6 | 0.0 | 0.2 | 12.3 | 1941.8 | -6.2 |
| 126 | 1000 0010 | 1928.75 | 1951.8 | -0.3 | 0.3 | 20.1 | 1957.6 | -1.9 |
| 127 | 1000 0001 | 1944.38 | 1971.3 | -0.1 | -0.1 | 15.5 | 1973.5 | 2.2 |
| 128 | 1000 0000 | 1960.00 | 1994.5 | 0.8 | 0.1 | 23.2 | 1989.4 | 5.1 |
| 129 | 0111 1111 | 1975.63 | 2003.2 | 0.2 | 0.2 | 8.7 | 2005.3 | -2.1 |
| 130 | 0111 1110 | 1991.25 | 2019.7 | -0.1 | -0.0 | 16.4 | 2021.2 | -1.5 |

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HS-236 THEMATIC MAPPER MIX UNIT TEST MOD1.. FL1. S/N 3 PAGE 172

1981/12/01 09:25:04 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.1.1.1.1 AND THRESHOLD TEST (RANDOM 5% SENSITIVITY=14)

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1151
527

| THRESHOLD AND OUTPUT
NUMBER | THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--------------------------------|-----------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 131 | 0111 1101 | 2006.88 | 2038.8 | -0.2 | -0.2 | 19.2 | 2037.0 | 1.8 |
| 132 | 0111 1100 | 2022.50 | 2052.9 | 0.0 | -0.6 | 14.1 | 2052.9 | -0.0 |
| 133 | 0111 1011 | 2038.13 | 2068.8 | 0.1 | 0.1 | 15.9 | 2068.8 | 0.0 |
| 134 | 0111 1010 | 2053.75 | 2090.4 | 0.6 | 0.6 | 21.6 | 2089.7 | 5.7 |
| 135 | 0111 1001 | 2069.38 | 2110.2 | -0.7 | -0.1 | 19.8 | 2100.5 | 9.6 |
| 136 | 0111 1000 | 2085.00 | 2115.5 | -0.4 | -0.4 | 5.3 | 2116.4 | -0.9 |
| 137 | 0111 0111 | 2100.63 | 2129.8 | 0.2 | -0.1 | 14.3 | 2132.3 | -2.5 |
| 138 | 0111 0110 | 2116.25 | 2148.4 | 0.1 | 0.2 | 18.6 | 2148.2 | 0.3 |
| 139 | 0111 0101 | 2131.88 | 2170.9 | -0.0 | 0.1 | 22.4 | 2164.0 | 6.8 |
| 140 | 0111 0100 | 2147.50 | 2187.8 | -0.1 | -0.5 | 16.9 | 2179.9 | 7.9 |
| 141 | 0111 0011 | 2163.13 | 2195.6 | -0.4 | 0.4 | 7.7 | 2195.8 | -0.2 |
| 142 | 0111 0010 | 2178.75 | 2216.1 | 0.0 | 0.1 | 20.6 | 2211.7 | 4.5 |
| 143 | 0111 0001 | 2194.38 | 2234.6 | 0.4 | 0.3 | 18.5 | 2227.5 | 7.1 |
| 144 | 0111 0000 | 2210.00 | 2246.6 | -0.4 | 0.0 | 12.0 | 2243.4 | 3.2 |
| 145 | 0110 1111 | 2225.63 | 2256.1 | -0.3 | -0.3 | 9.5 | 2259.3 | -3.2 |
| 146 | 0110 1110 | 2241.25 | 2272.7 | -0.0 | -0.2 | 16.6 | 2275.2 | -2.5 |
| 147 | 0110 1101 | 2256.88 | 2291.2 | 0.1 | 0.1 | 18.5 | 2291.1 | 0.1 |
| 148 | 0110 1100 | 2272.50 | 2307.7 | 0.4 | 0.3 | 16.6 | 2306.9 | 0.8 |
| 149 | 0110 1011 | 2288.13 | 2321.7 | -0.4 | -0.4 | 13.9 | 2322.8 | -1.1 |
| 150 | 0110 1010 | 2303.75 | 2344.4 | -0.4 | -0.4 | 22.7 | 2338.7 | 5.7 |
| 151 | 0110 1001 | 2319.38 | 2362.4 | 0.3 | -0.0 | 18.0 | 2354.6 | 7.8 |
| 152 | 0110 1000 | 2335.00 | 2372.5 | 0.7 | 0.7 | 10.1 | 2370.4 | 2.1 |
| 153 | 0110 0111 | 2350.63 | 2382.2 | 0.1 | 0.3 | 9.6 | 2386.3 | -4.2 |
| 154 | 0110 0110 | 2366.25 | 2401.4 | -0.2 | -0.3 | 19.2 | 2402.2 | -0.8 |
| 155 | 0110 0101 | 2381.88 | 2417.7 | -0.2 | -0.2 | 16.3 | 2418.1 | -0.4 |
| 156 | 0110 0100 | 2397.50 | 2434.7 | 0.4 | 0.5 | 19.0 | 2433.9 | 2.8 |
| 157 | 0110 0011 | 2413.13 | 2447.5 | 0.4 | 0.4 | 10.7 | 2449.8 | -2.4 |

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Appendix A

Multiplexer Performance Data

A/D THRESHOLD TEST DATA
Band 6

Section 4F

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 177
 1981/12/01 09:31:34 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 4.5.4.5-4 AND THRESHOLD TEST CRAND= 6, SENSOR=1
 SUMMARY

CHECK 1) RMS ERROR 2) THRESHOLD INCREMENT (+/- 0.0) = THRESH INC = 31.2)
 THE REMAINING DATA ARE FOR INFORMATION ONLY

CH44 F11 STRAIGHT LINE IS: $Y = 15.473X - 19.8MV$

DEVIATION OF SLOPE FROM IDEAL IS: -0.971%
 OFFSET IS: -19.8MV
 COEFFICIENT OF DETERMINATION IS: $R^2 = .99998830$
 ANALOG INPUT DURING DC RESTORE IS: 63.8MV

RMS ERROR = 4.392MV REQMT: RMS ERROR $\leq 7.812MV$

THRESHOLD INCREMENT MEASUREMENT

| HAC TEST S27 | MAXIMUM THRESHOLD # | AVERAGE | HAC TEST S27 | MINIMUM THRESHOLD # | STANDARD DEVIATION |
|--------------|---------------------|----------|--------------|---------------------|--------------------|
| 39.4MV | 193 | 15.538MV | -0.1MV | 160 | 5.762MV |

UPPER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 44.1MV | 124 | -0.020MV | -6.0MV | 249 | 3.100MV |

UPPER LIMIT AT INPUT LEVELS RATIO = 1 : 1

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|---------|---------|-------------|--------------------|
| 5.9MV | 233 | 0.077MV | -1.6MV | 99 | 1.283MV |

TEST FAILED

Failed per F.R. # F4265 By 12/1/81

*see Q.C.H.R.
 sheet #11 Line #8*



DEC 01 '81

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HS-734 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 178

1981/12/01 09:31:48 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

31.5, 11.5-4 AND THRESHOLD TEST (RANGE= 4, SENSOR=1)



DEC 01 '81

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO- 1:1
NOMINAL LOWER UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT DEVIATION |
|--|------------------------|---|------------------------------------|---|
|--|------------------------|---|------------------------------------|---|

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | | |
|----|-----------|---------|-------|------|------|------|-------|------|
| 1 | 1111 1111 | -24.375 | -12.7 | -2.2 | -1.6 | | -4.3 | -8.4 |
| 2 | 1111 1110 | -8.750 | 2.8 | -0.1 | -1.0 | 15.5 | 11.2 | -8.4 |
| 3 | 1111 1101 | 6.875 | 20.9 | 1.5 | 1.6 | 18.0 | 26.7 | -5.8 |
| 4 | 1111 1100 | 22.500 | 35.5 | 1.6 | 1.7 | 14.6 | 42.1 | -6.6 |
| 5 | 1111 1011 | 38.125 | 53.2 | -1.6 | -1.5 | 17.7 | 57.6 | -4.4 |
| 6 | 1111 1010 | 53.750 | 69.4 | -1.0 | -0.9 | 16.2 | 71.1 | -3.7 |
| 7 | 1111 1001 | 69.375 | 86.7 | 1.5 | -0.0 | 17.3 | 88.6 | -1.8 |
| 8 | 1111 1000 | 85.000 | 96.9 | 0.9 | 0.9 | 10.2 | 104.0 | -7.1 |
| 9 | 1111 0111 | 100.625 | 112.2 | -0.0 | 1.5 | 15.3 | 119.5 | -7.3 |
| 10 | 1111 0110 | 116.250 | 131.4 | -1.0 | -1.0 | 19.2 | 135.0 | -3.6 |
| 11 | 1111 0101 | 131.875 | 148.8 | -1.5 | -1.5 | 17.4 | 150.4 | -1.6 |
| 12 | 1111 0100 | 147.500 | 164.8 | 1.5 | 1.4 | 16.0 | 165.9 | -1.1 |
| 13 | 1111 0011 | 163.125 | 177.9 | 1.4 | 1.5 | 13.1 | 181.4 | -3.5 |
| 14 | 1111 0010 | 178.750 | 197.9 | -1.1 | 0.0 | 19.9 | 196.9 | 1.0 |
| 15 | 1111 0001 | 194.375 | 214.5 | -1.6 | -1.5 | 16.6 | 212.3 | 2.1 |
| 16 | 1111 0000 | 210.000 | 224.7 | -0.0 | -1.2 | 10.2 | 227.8 | -3.1 |
| 17 | 1110 1111 | 229.625 | 236.9 | 1.6 | 1.6 | 12.2 | 243.3 | -6.4 |
| 18 | 1110 1110 | 241.250 | 253.7 | 0.9 | 1.0 | 16.8 | 258.8 | -5.1 |
| 19 | 1110 1101 | 256.875 | 273.5 | -1.6 | -1.5 | 19.8 | 274.2 | -0.7 |
| 20 | 1110 1100 | 272.500 | 291.0 | -1.5 | -1.5 | 17.5 | 289.7 | 1.3 |
| 21 | 1110 1011 | 288.125 | 307.5 | 1.5 | 0.0 | 11.5 | 305.2 | -2.7 |
| 22 | 1110 1010 | 303.750 | 320.1 | 0.9 | 1.0 | 17.5 | 320.7 | -0.6 |
| 23 | 1110 1001 | 319.375 | 337.5 | -0.0 | 1.5 | 17.4 | 336.1 | 1.4 |
| 24 | 1110 1000 | 335.000 | 351.8 | -1.0 | -0.9 | 14.3 | 351.6 | 0.2 |
| 25 | 1110 0111 | 350.625 | 364.3 | -1.5 | -1.6 | 12.5 | 367.1 | -2.7 |

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HS-206 THEMATIC MATTER MUX UNIT TEST MODFL., F.I.T. S/N 3 PAGE 179

1981/12/01 09:31:48 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

14.5.14.5-4 AND THRESHOLD TEST CHAND= 6, SENSOR=1

HAC
TEST
527

010101

| THRESHOLD A/D OUTPUT
NUMBER THRESHOLD | TOTAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | |
|--|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION | |
| 26 | 1110 0110 | 366.250 | 381.7 | 0.9 | 1.0 | 17.4 | 382.5 | -0.8 |
| 27 | 1110 0101 | 381.875 | 397.8 | 1.4 | 1.5 | 16.1 | 398.0 | -0.2 |
| 28 | 1110 0100 | 397.500 | 419.6 | -1.5 | 0.0 | 21.8 | 413.5 | 6.1 |
| 29 | 1110 0011 | 413.125 | 429.7 | -1.5 | -1.5 | 10.1 | 429.0 | 0.7 |
| 30 | 1110 0010 | 428.750 | 448.9 | -0.1 | -0.9 | 19.2 | 444.4 | 4.4 |
| 31 | 1110 0001 | 444.375 | 463.1 | 1.4 | 1.5 | 14.2 | 459.9 | 3.2 |
| 32 | 1110 0000 | 460.000 | 468.7 | 0.9 | 0.9 | 5.7 | 475.4 | -6.6 |
| 33 | 1101 1111 | 475.625 | 487.7 | -1.6 | -1.6 | 18.9 | 490.9 | -3.2 |
| 34 | 1101 1110 | 491.250 | 502.2 | -1.0 | -0.9 | 14.5 | 506.3 | -4.1 |
| 35 | 1101 1101 | 506.875 | 521.0 | 1.5 | 0.0 | 18.8 | 521.8 | -0.8 |
| 36 | 1101 1100 | 522.500 | 535.5 | 1.5 | 1.4 | 14.5 | 537.3 | -1.8 |
| 37 | 1101 1011 | 538.125 | 551.5 | -0.0 | 1.5 | 16.0 | 552.8 | -1.3 |
| 38 | 1101 1010 | 553.750 | 568.4 | -1.0 | -0.9 | 16.9 | 568.2 | 0.1 |
| 39 | 1101 1001 | 569.375 | 587.8 | -1.5 | -1.5 | 19.4 | 583.7 | 4.1 |
| 40 | 1101 1000 | 585.000 | 598.4 | 0.9 | 1.0 | 10.6 | 599.2 | -0.7 |
| 41 | 1101 0111 | 600.625 | 611.5 | 1.5 | 1.6 | 13.1 | 614.6 | -3.1 |
| 42 | 1101 0110 | 616.250 | 629.7 | -0.9 | -0.0 | 18.2 | 630.1 | -0.4 |
| 43 | 1101 0101 | 631.875 | 647.8 | -1.5 | -1.5 | 18.1 | 645.6 | 2.2 |
| 44 | 1101 0100 | 647.500 | 665.1 | 0.0 | -1.4 | 17.3 | 661.1 | 4.0 |
| 45 | 1101 0011 | 663.125 | 676.6 | 1.5 | 1.5 | 11.5 | 676.5 | 0.0 |
| 46 | 1101 0010 | 678.750 | 694.6 | 0.9 | 1.0 | 18.1 | 692.0 | 2.6 |
| 47 | 1101 0001 | 694.375 | 712.8 | -1.5 | -1.5 | 18.1 | 707.5 | 3.3 |
| 48 | 1101 0000 | 710.000 | 727.8 | -1.3 | -1.2 | 15.0 | 723.0 | 4.9 |
| 49 | 1100 1111 | 725.625 | 735.1 | 1.5 | -0.0 | 7.3 | 738.4 | -3.3 |
| 50 | 1100 1110 | 741.250 | 750.9 | 0.9 | 0.9 | 15.7 | 753.9 | -3.0 |
| 51 | 1100 1101 | 756.875 | 771.8 | -2.1 | -0.6 | 20.9 | 769.4 | 2.4 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 181

1981/12/01 09:31:48 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1.5.1.1.1-B AND THRESHOLD TEST (RAND= 6, SENSOR=1)

HAC
TEST
S27

000181

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 79 | 1011 0001 | 1194.38 | 1208.9 | 0.0 | 1.4 | 17.3 | 1202.6 | 6.3 |
| 80 | 1011 0000 | 1210.00 | 1222.3 | -0.9 | -1.0 | 13.3 | 1218.1 | 4.2 |
| 81 | 1010 1111 | 1225.63 | 1234.2 | 0.0 | -1.6 | 11.9 | 1233.6 | 0.6 |
| 82 | 1010 1110 | 1241.25 | 1247.5 | 1.0 | 1.0 | 13.1 | 1249.1 | -1.8 |
| 83 | 1010 1101 | 1256.88 | 1270.0 | -1.5 | 1.5 | 22.7 | 1264.5 | 5.5 |
| 84 | 1010 1100 | 1272.50 | 1283.0 | -1.4 | -0.0 | 13.0 | 1280.0 | 3.0 |
| 85 | 1010 1011 | 1288.13 | 1298.6 | -1.5 | -1.5 | 15.6 | 1295.5 | 3.1 |
| 86 | 1010 1010 | 1303.75 | 1313.6 | -0.0 | -1.0 | 15.0 | 1310.9 | 2.7 |
| 87 | 1010 1001 | 1319.38 | 1331.4 | 1.5 | 1.5 | 17.8 | 1326.4 | 5.0 |
| 88 | 1010 1000 | 1335.00 | 1342.4 | 0.0 | 0.9 | 10.9 | 1341.9 | 0.5 |
| 89 | 1010 0111 | 1350.63 | 1357.9 | -1.5 | -1.5 | 15.5 | 1357.4 | 0.5 |
| 90 | 1010 0110 | 1366.25 | 1374.1 | -1.0 | -0.9 | 16.3 | 1372.8 | 1.3 |
| 91 | 1010 0101 | 1381.88 | 1390.7 | 1.5 | 3.2 | 16.5 | 1388.3 | 2.4 |
| 92 | 1010 0100 | 1397.50 | 1408.5 | 1.4 | 1.4 | 17.8 | 1403.8 | 4.8 |
| 93 | 1010 0011 | 1413.13 | 1420.7 | -0.0 | 1.4 | 12.1 | 1419.3 | 1.4 |
| 94 | 1010 0010 | 1428.75 | 1439.4 | -0.9 | -1.0 | 18.7 | 1434.7 | 4.6 |
| 95 | 1010 0001 | 1444.38 | 1456.4 | 0.1 | -1.5 | 17.1 | 1450.2 | 6.2 |
| 96 | 1010 0000 | 1460.00 | 1461.6 | 1.0 | 1.0 | 5.1 | 1465.7 | -4.1 |
| 97 | 1001 1111 | 1475.63 | 1477.8 | 1.5 | 1.5 | 16.2 | 1481.2 | -3.3 |
| 98 | 1001 1110 | 1491.25 | 1492.0 | -1.0 | 0.0 | 14.2 | 1496.6 | -4.6 |
| 99 | 1001 1101 | 1506.88 | 1517.2 | -1.6 | -1.6 | 25.1 | 1512.1 | 5.1 |
| 100 | 1001 1100 | 1522.50 | 1525.1 | 0.0 | -1.5 | 8.0 | 1527.6 | -2.4 |
| 101 | 1001 1011 | 1538.13 | 1542.1 | 1.5 | 1.5 | 17.0 | 1543.0 | -0.9 |
| 102 | 1001 1010 | 1553.75 | 1556.3 | -0.1 | 0.9 | 14.2 | 1558.5 | -2.2 |
| 103 | 1001 1001 | 1569.38 | 1581.3 | -1.5 | -1.5 | 25.0 | 1574.0 | 7.3 |
| 104 | 1001 1000 | 1585.00 | 1587.0 | -0.8 | -0.8 | 5.7 | 1589.5 | -2.5 |

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HS-236 THERMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 182

1981/12/01 09:31:48 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1981/12/01 09:31:48 AND THRESHOLD TEST (BAND= 6, SENSOR=1)

| THRESHOLD A/D OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO
NOMINAL LOWER UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT DEVIATION |
|--|------------------------|--|------------------------------------|---|
| 105 | 1001 0111 | 1600.63 1601.5 1.5 0.0 14.5 | 14.5 | 1604.9 -3.4 |
| 106 | 1001 0110 | 1616.25 1616.9 0.9 0.9 15.4 | 15.4 | 1620.4 -3.5 |
| 107 | 1001 0101 | 1631.88 1639.0 -3.1 1.6 22.1 | 22.1 | 1635.9 3.1 |
| 108 | 1001 0100 | 1647.50 1651.2 1.2 1.2 12.2 | 12.2 | 1651.4 -0.1 |
| 109 | 1001 0011 | 1663.13 1667.2 0.0 -1.5 15.9 | 15.9 | 1666.8 0.3 |
| 110 | 1001 0010 | 1678.75 1682.0 0.9 1.0 14.8 | 14.8 | 1682.3 -0.3 |
| 111 | 1001 0001 | 1694.38 1700.1 1.4 1.4 18.0 | 18.0 | 1697.8 2.3 |
| 112 | 1001 0000 | 1710.00 1715.8 -1.1 0.0 15.7 | 15.7 | 1713.3 2.6 |
| 113 | 1000 1111 | 1725.63 1725.3 -1.5 -1.6 9.5 | 9.5 | 1728.7 -3.4 |
| 114 | 1000 1110 | 1741.25 1738.6 0.0 -1.0 13.2 | 13.2 | 1744.2 -5.6 |
| 115 | 1000 1101 | 1756.88 1761.7 1.5 1.5 23.1 | 23.1 | 1759.7 2.0 |
| 116 | 1000 1100 | 1772.50 1772.3 0.0 1.5 10.6 | 10.6 | 1775.1 -2.9 |
| 117 | 1000 1011 | 1788.13 1789.5 -1.5 -1.5 17.2 | 17.2 | 1790.6 -1.2 |
| 118 | 1000 1010 | 1803.75 1803.7 -1.0 -1.0 14.2 | 14.2 | 1806.1 -2.4 |
| 119 | 1000 1001 | 1819.38 1825.6 -1.9 -0.1 21.9 | 21.9 | 1821.6 4.0 |
| 120 | 1000 1000 | 1835.00 1834.9 0.9 0.9 9.3 | 9.3 | 1837.0 -2.1 |
| 121 | 1000 0111 | 1850.63 1847.2 0.0 1.4 12.2 | 12.2 | 1852.5 -5.3 |
| 122 | 1000 0110 | 1866.25 1864.0 -0.9 -0.9 16.8 | 16.8 | 1868.0 -4.0 |
| 123 | 1000 0101 | 1881.88 1886.4 0.0 -1.6 22.4 | 22.4 | 1883.5 2.9 |
| 124 | 1000 0100 | 1897.50 1898.5 44.1 1.5 12.1 | 12.1 | 1898.9 -0.4 |
| 125 | 1000 0011 | 1913.13 1911.2 1.4 1.4 12.7 | 12.7 | 1914.4 -3.2 |
| 126 | 1000 0010 | 1928.75 1929.0 -0.9 0.0 17.8 | 17.8 | 1929.9 -0.9 |
| 127 | 1000 0001 | 1944.38 1946.9 -1.5 -1.5 17.9 | 17.9 | 1945.4 1.6 |
| 128 | 1000 0000 | 1960.00 1964.0 -0.1 -0.5 17.0 | 17.0 | 1960.8 3.2 |
| 129 | 0111 1111 | 1975.63 1976.6 1.5 1.6 12.6 | 12.6 | 1976.3 0.3 |
| 130 | 0111 1110 | 1991.25 1991.5 0.0 0.9 14.9 | 14.9 | 1991.8 -0.3 |

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HS-236 THERMATIC MATTER MIX UNIT TEST MODEL 11 FLT. S/N 3 PAGE 185

1981/12/01 09:31:40 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST TYPE = 11 ANALOG INPUT VOLTAGE TEST CHANNEL = 6 SENSITIVITY = 1

| THRESHOLD
NUMBER | A/D
THRESHOLD | OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|------------------|---------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 184 | 0100 | 1000 | 2835.00 | 2823.7 | 0.7 | 0.0 | 0.6 | 2827.3 | -3.6 |
| 185 | 0100 | 0111 | 2850.63 | 2836.8 | 1.5 | 1.4 | 13.1 | 2842.8 | -6.0 |
| 186 | 0100 | 0110 | 2866.25 | 2853.3 | -0.0 | 1.0 | 16.5 | 2858.3 | -4.9 |
| 187 | 0100 | 0101 | 2881.88 | 2874.3 | -1.5 | -1.5 | 21.0 | 2873.7 | 0.6 |
| 188 | 0100 | 0100 | 2897.50 | 2889.7 | -1.4 | -1.4 | 15.4 | 2889.2 | 0.5 |
| 189 | 0100 | 0011 | 2913.13 | 2901.1 | 1.4 | -0.0 | 11.3 | 2904.7 | -3.6 |
| 190 | 0100 | 0010 | 2928.75 | 2918.7 | 0.8 | 0.8 | 17.6 | 2920.2 | -1.5 |
| 191 | 0100 | 0001 | 2944.38 | 2930.6 | -0.8 | -0.0 | 12.0 | 2935.6 | -5.0 |
| 192 | 0100 | 0000 | 2960.00 | 2970.7 | -0.9 | -0.9 | 0.1 | 2951.1 | -20.4 |
| 193 | 0011 | 1111 | 2975.63 | 2970.1 | -5.9 | -1.2 | 39.4 | 2966.6 | 3.5 |
| 194 | 0011 | 1110 | 2991.25 | 2975.8 | 1.0 | 1.0 | 5.7 | 2982.1 | -6.3 |
| 195 | 0011 | 1101 | 3006.88 | 3001.6 | 1.7 | 1.8 | 25.8 | 2997.5 | 4.1 |
| 196 | 0011 | 1100 | 3022.50 | 3007.3 | -1.5 | -0.0 | 5.7 | 3013.0 | -5.7 |
| 197 | 0011 | 1011 | 3038.13 | 3028.7 | -1.6 | -1.5 | 21.4 | 3028.5 | 0.3 |
| 198 | 0011 | 1010 | 3053.75 | 3041.1 | 1.0 | 0.0 | 12.4 | 3044.0 | -2.8 |
| 199 | 0011 | 1001 | 3069.38 | 3063.7 | 1.1 | 1.1 | 22.6 | 3059.4 | 4.3 |
| 200 | 0011 | 1000 | 3085.00 | 3063.9 | -0.0 | 0.9 | 0.2 | 3074.9 | -11.0 |
| 201 | 0011 | 0111 | 3100.63 | 3088.3 | -1.5 | -1.4 | 24.4 | 3090.4 | -2.1 |
| 202 | 0011 | 0110 | 3116.25 | 3103.1 | -1.0 | -0.9 | 14.7 | 3105.8 | -2.0 |
| 203 | 0011 | 0101 | 3131.88 | 3123.3 | 1.4 | -0.1 | 20.2 | 3121.3 | 1.9 |
| 204 | 0011 | 0100 | 3147.50 | 3136.9 | -3.0 | 1.6 | 13.6 | 3136.0 | 0.1 |
| 205 | 0011 | 0011 | 3163.13 | 3152.9 | -1.5 | 0.0 | 16.0 | 3152.3 | 0.2 |
| 206 | 0011 | 0010 | 3178.75 | 3168.6 | -1.0 | -0.9 | 15.6 | 3167.7 | 0.8 |
| 207 | 0011 | 0001 | 3194.38 | 3187.5 | 0.0 | 0.6 | 18.9 | 3183.2 | 4.3 |
| 208 | 0011 | 0000 | 3210.00 | 3189.4 | 1.2 | 1.4 | 1.9 | 3198.7 | 9.1 |
| 209 | 0010 | 1111 | 3225.63 | 3216.0 | -4.5 | 1.4 | 26.6 | 3214.2 | 1.8 |

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HAC
TEST
527

DEC 01 '81

HAC
TEST
527

DEC 01 '81

HS-212 THMATIC MATTER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 186

1981/12/01 09:31:48 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST CHAND= 6, SENSOR=1



DEC 01 81

| THRESHOLD
NUMBER | A/D
THRESHOLD | OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|------------------|---------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 210 | 0010 | 1110 | 3241.25 | 3224.7 | -1.0 | -0.0 | 8.7 | 3229.6 | -4.9 |
| 211 | 0010 | 1101 | 3256.88 | 3250.8 | -1.6 | -1.5 | 26.0 | 3245.1 | 5.7 |
| 212 | 0010 | 1100 | 3272.50 | 3260.2 | 1.4 | 0.0 | 9.4 | 3260.6 | -0.4 |
| 213 | 0010 | 1011 | 3288.13 | 3274.9 | 1.4 | 1.5 | 14.7 | 3276.1 | -1.2 |
| 214 | 0010 | 1010 | 3303.75 | 3289.4 | -0.1 | 0.9 | 14.6 | 3291.5 | -2.1 |
| 215 | 0010 | 1001 | 3319.38 | 3312.7 | -1.4 | -1.4 | 23.3 | 3307.0 | 5.7 |
| 216 | 0010 | 1000 | 3335.00 | 3316.9 | -0.7 | -0.7 | 4.2 | 3322.5 | -5.6 |
| 217 | 0010 | 0111 | 3350.63 | 3334.6 | 1.5 | 0.0 | 17.7 | 3337.9 | -3.3 |
| 218 | 0010 | 0110 | 3366.25 | 3350.4 | 0.8 | 0.9 | 15.8 | 3353.4 | -3.0 |
| 219 | 0010 | 0101 | 3381.88 | 3372.6 | -1.6 | 0.1 | 22.2 | 3368.9 | 3.7 |
| 220 | 0010 | 0100 | 3397.50 | 3389.0 | -1.4 | -1.3 | 16.4 | 3384.4 | 4.7 |
| 221 | 0010 | 0011 | 3413.13 | 3400.8 | 0.1 | -1.4 | 11.8 | 3399.8 | 1.0 |
| 222 | 0010 | 0010 | 3428.75 | 3416.2 | 0.9 | 1.0 | 15.4 | 3415.3 | 0.9 |
| 223 | 0010 | 0001 | 3444.38 | 3426.9 | 0.7 | 0.8 | 10.7 | 3430.8 | -3.9 |
| 224 | 0010 | 0000 | 3460.00 | 3427.7 | -0.8 | 0.0 | 0.8 | 3446.3 | -10.6 |
| 225 | 0001 | 1111 | 3475.63 | 3464.0 | -1.5 | 1.3 | 26.3 | 3461.7 | 2.2 |
| 226 | 0001 | 1110 | 3491.25 | 3469.6 | 0.9 | -0.1 | 5.6 | 3477.2 | -7.6 |
| 227 | 0001 | 1101 | 3506.88 | 3496.5 | 1.3 | 1.5 | 26.9 | 3492.7 | 3.8 |
| 228 | 0001 | 1100 | 3522.50 | 3504.4 | -3.9 | 1.4 | 7.9 | 3508.2 | -3.7 |
| 229 | 0001 | 1011 | 3538.13 | 3523.9 | -1.6 | -1.5 | 19.5 | 3523.6 | 0.3 |
| 230 | 0001 | 1010 | 3553.75 | 3536.5 | -1.0 | -0.9 | 12.5 | 3539.1 | -2.6 |
| 231 | 0001 | 1001 | 3569.38 | 3558.9 | 1.5 | -0.0 | 22.4 | 3554.6 | 4.3 |
| 232 | 0001 | 1000 | 3585.00 | 3560.1 | 0.9 | 0.9 | 1.2 | 3570.0 | -9.9 |
| 233 | 0001 | 0111 | 3600.63 | 3584.0 | -1.6 | 5.9 | 23.9 | 3585.5 | -1.5 |
| 234 | 0001 | 0110 | 3616.25 | 3597.8 | -0.9 | -0.9 | 13.8 | 3601.0 | -3.2 |
| 235 | 0001 | 0101 | 3631.88 | 3623.3 | 0.2 | -1.6 | 25.5 | 3616.5 | 6.8 |
| 236 | 0001 | 0100 | 3647.50 | 3632.4 | 3.0 | 1.5 | 9.0 | 3631.9 | 0.4 |

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OF POOR QUALITY

HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 187

1981/12/01 09:31:48 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

23.11.14.5--41 AND THRESHOLD TEST CHAND= 6. SENSOR=1



010181

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 237 | 0001 0011 | 3663.13 | 3647.5 | 1.5 | 1.5 | 15.1 | 3647.4 | 0.1 |
| 238 | 0001 0010 | 3678.75 | 3663.8 | -1.0 | 0.0 | 16.3 | 3662.9 | 0.9 |
| 239 | 0001 0001 | 3694.38 | 3685.5 | -1.4 | -1.4 | 21.6 | 3678.4 | 7.1 |
| 240 | 0001 0000 | 3710.00 | 3686.7 | 1.1 | 0.0 | 1.2 | 3693.8 | -7.1 |
| 241 | 0000 1111 | 3725.63 | 3711.7 | 1.3 | 1.4 | 25.0 | 3709.3 | 2.4 |
| 242 | 0000 1110 | 3741.25 | 3719.4 | -0.1 | 0.9 | 7.7 | 3724.8 | -5.4 |
| 243 | 0000 1101 | 3756.88 | 3747.1 | -1.5 | -1.4 | 27.8 | 3740.3 | 6.9 |
| 244 | 0000 1100 | 3772.50 | 3758.1 | -1.3 | -1.3 | 10.9 | 3755.7 | 2.4 |
| 245 | 0000 1011 | 3788.13 | 3771.8 | 1.4 | -0.0 | 13.7 | 3771.2 | 0.6 |
| 246 | 0000 1010 | 3803.75 | 3785.5 | 0.9 | 1.0 | 13.7 | 3786.7 | -1.2 |
| 247 | 0000 1001 | 3819.38 | 3812.7 | -1.0 | 0.1 | 27.2 | 3802.1 | 10.5 |
| 248 | 0000 1000 | 3835.00 | 3813.7 | -0.8 | -1.1 | 1.1 | 3817.6 | -3.9 |
| 249 | 0000 0111 | 3850.63 | 3839.4 | -6.0 | -1.2 | 25.6 | 3833.1 | 6.3 |
| 250 | 0000 0110 | 3866.25 | 3846.9 | 0.9 | 1.0 | 7.6 | 3848.6 | -1.6 |
| 251 | 0000 0101 | 3881.88 | 3871.5 | 1.0 | 1.3 | 24.5 | 3864.0 | 7.4 |
| 252 | 0000 0100 | 3897.50 | 3882.3 | -1.5 | -0.1 | 10.8 | 3879.5 | 2.8 |
| 253 | 0000 0011 | 3913.13 | 3898.7 | -1.5 | -1.4 | 16.4 | 3895.0 | 3.8 |
| 254 | 0000 0010 | 3928.75 | 3913.3 | 0.8 | 0.0 | 14.6 | 3910.5 | 2.9 |
| 255 | 0000 0001 | 3944.38 | 3933.9 | 1.4 | 1.4 | 20.6 | 3925.9 | 8.0 |

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HS 236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 189

1981/12/01 09:38:24 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

4.5.3.5-1 AND THRESHOLD TEST (BAND= 4, SENSOR=2)



01/01

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVEL'S RATIO= 1 : 1 | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|------------------------|---|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | |
|----|-----------|---------|-------|------|------|-------|------|
| 1 | 1111 1111 | -24.375 | -13.0 | -0.2 | -1.6 | -5.0 | -8.0 |
| 2 | 1111 1110 | -8.750 | 1.2 | 0.9 | 1.0 | 10.4 | -9.2 |
| 3 | 1111 1101 | 6.875 | 20.5 | 1.5 | 1.5 | 25.9 | -5.4 |
| 4 | 1111 1100 | 22.500 | 36.6 | -1.6 | -1.5 | 41.4 | -4.8 |
| 5 | 1111 1011 | 38.125 | 52.7 | -1.6 | -1.6 | 56.9 | -4.1 |
| 6 | 1111 1010 | 53.750 | 67.7 | 1.0 | 0.0 | 72.4 | -4.7 |
| 7 | 1111 1001 | 69.375 | 86.3 | 1.5 | 1.6 | 87.8 | -1.6 |
| 8 | 1111 1000 | 85.000 | 96.1 | -0.0 | 1.0 | 103.3 | -7.2 |
| 9 | 1111 0111 | 100.625 | 113.3 | -1.6 | -1.6 | 118.8 | -0.5 |
| 10 | 1111 0110 | 116.250 | 130.7 | -1.0 | -1.0 | 134.3 | -3.6 |
| 11 | 1111 0101 | 131.875 | 146.8 | 1.5 | 1.6 | 149.7 | -2.9 |
| 12 | 1111 0100 | 147.500 | 163.9 | 4.5 | 1.7 | 165.2 | -1.3 |
| 13 | 1111 0011 | 163.125 | 178.9 | -1.5 | 0.0 | 180.7 | -1.8 |
| 14 | 1111 0010 | 178.750 | 197.1 | -1.0 | -0.9 | 196.2 | 0.9 |
| 15 | 1111 0001 | 194.375 | 214.0 | -0.0 | -1.6 | 211.6 | 2.3 |
| 16 | 1111 0000 | 210.000 | 223.0 | 1.3 | 1.3 | 227.1 | -4.1 |
| 17 | 1110 1111 | 225.625 | 236.4 | 1.6 | 1.6 | 242.6 | -6.2 |
| 18 | 1110 1110 | 241.250 | 254.0 | -1.1 | -1.1 | 258.1 | -4.1 |
| 19 | 1110 1101 | 256.875 | 273.0 | -1.6 | -1.6 | 273.6 | -0.5 |
| 20 | 1110 1100 | 272.500 | 289.0 | 1.4 | -0.0 | 289.0 | 0.0 |
| 21 | 1110 1011 | 288.125 | 302.0 | 1.5 | 1.5 | 304.5 | -2.5 |
| 22 | 1110 1010 | 303.750 | 319.3 | -0.0 | 1.0 | 320.0 | -0.7 |
| 23 | 1110 1001 | 319.375 | 338.6 | -1.6 | -1.6 | 335.5 | 3.1 |
| 24 | 1110 1000 | 335.000 | 351.0 | -1.0 | -0.9 | 350.9 | 0.0 |
| 25 | 1110 0111 | 350.625 | 362.3 | 1.5 | 1.5 | 366.4 | -4.1 |

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HS-216 THEMATIC MAPPER MUX UNIT TEST MODEL.. F.I.L. S/N 3 PAGE 190

1981/12/01 09:38:24 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

344-14-1-1-1 AND THRESHOLD TEST CRAND= 4, SENSOR=?

HAC
TEST
S27

01/81

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | TOTAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 26 | 1110 0110 | 366.250 | 381.0 | 0.9 | 0.9 | 381.9 | -0.9 |
| 27 | 1110 0101 | 381.875 | 398.8 | -1.6 | -0.0 | 397.4 | 1.4 |
| 28 | 1110 0100 | 397.500 | 419.3 | -1.7 | -1.6 | 412.8 | 6.4 |
| 29 | 1110 0011 | 413.125 | 429.2 | 0.0 | -1.5 | 428.3 | 0.8 |
| 30 | 1110 0010 | 428.750 | 447.2 | 0.9 | 0.9 | 443.8 | 3.4 |
| 31 | 1110 0001 | 444.375 | 462.6 | 1.4 | 1.4 | 459.3 | 3.3 |
| 32 | 1110 0000 | 460.000 | 468.9 | -1.0 | -0.9 | 474.8 | -5.9 |
| 33 | 1101 1111 | 475.625 | 487.1 | -1.6 | -1.6 | 490.2 | -3.1 |
| 34 | 1101 1110 | 491.250 | 500.4 | 1.0 | 0.0 | 505.7 | -5.3 |
| 35 | 1101 1101 | 506.875 | 520.4 | 1.5 | 1.6 | 521.2 | -0.7 |
| 36 | 1101 1100 | 522.500 | 535.0 | -0.1 | 1.5 | 536.7 | -1.7 |
| 37 | 1101 1011 | 538.125 | 552.5 | -1.5 | -1.5 | 552.1 | 0.3 |
| 38 | 1101 1010 | 553.750 | 567.6 | -1.1 | -1.0 | 567.6 | 0.0 |
| 39 | 1101 1001 | 569.375 | 585.7 | 1.6 | 1.5 | 583.1 | 2.6 |
| 40 | 1101 1000 | 585.000 | 597.6 | 0.9 | 0.9 | 598.6 | -1.0 |
| 41 | 1101 0111 | 600.625 | 612.5 | -1.5 | 0.0 | 614.0 | -1.6 |
| 42 | 1101 0110 | 616.250 | 629.0 | -1.0 | -1.0 | 629.5 | -0.5 |
| 43 | 1101 0101 | 631.875 | 647.3 | -0.0 | -1.5 | 645.0 | 2.3 |
| 44 | 1101 0100 | 647.500 | 662.8 | 1.5 | 1.5 | 660.5 | 2.3 |
| 45 | 1101 0011 | 663.125 | 676.0 | 1.5 | 1.5 | 676.0 | 0.0 |
| 46 | 1101 0010 | 678.750 | 694.8 | -0.9 | -1.0 | 691.4 | 3.4 |
| 47 | 1101 0001 | 694.375 | 712.2 | -1.5 | -1.5 | 706.9 | 5.3 |
| 48 | 1101 0000 | 710.000 | 726.0 | -1.7 | 0.0 | 722.4 | 3.6 |
| 49 | 1100 1111 | 725.625 | 734.5 | 1.6 | 1.6 | 737.9 | -3.4 |
| 50 | 1100 1110 | 741.250 | 750.0 | 0.0 | 0.9 | 753.3 | -3.3 |
| 51 | 1100 1101 | 756.875 | 770.7 | 0.1 | 0.2 | 768.8 | 1.8 |

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HS-236 THERMATIC MASTER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 191

1981/12/01 09:38:24 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.1.3.5-4 AND THRESHOLD TEST (FAND= 6, SENSOR=12)



MC01W

| THRESHOLD AND OUTPUT
NUMBER | THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--------------------------------|-----------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 52 | 1100 1100 | 772.500 | 787.9 | -1.4 | -1.5 | 17.2 | 784.3 | 3.6 |
| 53 | 1100 1011 | 788.125 | 799.4 | 1.5 | 1.4 | 11.5 | 799.8 | -0.4 |
| 54 | 1100 1010 | 803.750 | 815.7 | 1.0 | 1.0 | 16.3 | 815.2 | 0.5 |
| 55 | 1100 1001 | 819.375 | 835.5 | -1.5 | 0.0 | 19.7 | 830.7 | 4.8 |
| 56 | 1100 1000 | 835.000 | 850.0 | -1.0 | -0.9 | 14.5 | 846.2 | 3.8 |
| 57 | 1100 0111 | 850.625 | 860.5 | 0.1 | -1.5 | 10.5 | 861.7 | -1.2 |
| 58 | 1100 0110 | 866.250 | 876.7 | 0.9 | 1.0 | 16.2 | 877.2 | -0.5 |
| 59 | 1100 0101 | 881.875 | 894.2 | 0.8 | 0.8 | 17.5 | 892.6 | 1.6 |
| 60 | 1100 0100 | 897.500 | 915.2 | -1.5 | -1.5 | 21.0 | 908.1 | 7.1 |
| 61 | 1100 0011 | 913.125 | 925.1 | -1.4 | -1.5 | 10.0 | 923.6 | 1.6 |
| 62 | 1100 0010 | 928.750 | 942.4 | 0.9 | 0.0 | 17.2 | 939.1 | 3.0 |
| 63 | 1100 0001 | 944.375 | 958.1 | 1.5 | 1.5 | 15.8 | 954.5 | 3.6 |
| 64 | 1100 0000 | 960.000 | 969.9 | 0.0 | -1.0 | 11.8 | 970.0 | -0.1 |
| 65 | 1011 1111 | 975.625 | 987.0 | -1.6 | -1.7 | 17.0 | 985.5 | 1.5 |
| 66 | 1011 1110 | 991.250 | 1000.3 | -1.0 | -1.0 | 13.3 | 1001.0 | -0.6 |
| 67 | 1011 1101 | 1006.88 | 1022.5 | -1.0 | 1.5 | 22.1 | 1016.5 | 6.0 |
| 68 | 1011 1100 | 1022.50 | 1031.7 | 1.5 | 1.6 | 9.2 | 1031.9 | -0.3 |
| 69 | 1011 1011 | 1038.13 | 1051.6 | -1.6 | -0.0 | 19.9 | 1047.4 | 4.2 |
| 70 | 1011 1010 | 1053.75 | 1065.7 | -1.0 | -1.0 | 14.2 | 1062.9 | 2.9 |
| 71 | 1011 1001 | 1069.38 | 1086.0 | 0.0 | -1.5 | 20.2 | 1078.4 | 7.6 |
| 72 | 1011 1000 | 1085.00 | 1092.2 | 1.0 | 0.9 | 6.2 | 1093.8 | -1.6 |
| 73 | 1011 0111 | 1100.63 | 1109.4 | 1.7 | 1.6 | 17.2 | 1109.3 | 0.1 |
| 74 | 1011 0110 | 1116.25 | 1126.6 | -1.0 | -1.0 | 17.1 | 1124.8 | 1.8 |
| 75 | 1011 0101 | 1131.88 | 1148.3 | -1.4 | -1.5 | 21.7 | 1140.3 | 8.0 |
| 76 | 1011 0100 | 1147.50 | 1160.6 | -0.9 | -0.1 | 12.3 | 1155.7 | 4.9 |
| 77 | 1011 0011 | 1163.13 | 1173.9 | 1.5 | 1.5 | 13.3 | 1171.2 | 2.7 |
| 78 | 1011 0010 | 1178.75 | 1190.9 | -0.0 | 1.0 | 17.0 | 1186.7 | 4.2 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL 111 S/N 3 PAGE 197

1981/12/01 09:38:24 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.14.17-4 AND THRESHOLD TEST CHANNEL= 4, SENSOR=2



| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | ANAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|-----------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 79 1011 0001 | 1194.38 | 1209.9 | -1.6 | -1.6 | 19.0 | 1202.2 | 7.7 |
| 80 1011 0000 | 1210.00 | 1218.9 | 1.3 | 1.5 | 9.0 | 1217.7 | 1.3 |
| 81 1010 1111 | 1225.63 | 1232.1 | 1.5 | 1.5 | 13.2 | 1233.1 | -1.0 |
| 82 1010 1110 | 1241.25 | 1246.6 | 1.0 | 1.0 | 14.5 | 1248.6 | -2.0 |
| 83 1010 1101 | 1256.88 | 1270.8 | -1.6 | 0.0 | 24.1 | 1264.1 | 6.7 |
| 84 1010 1100 | 1272.50 | 1282.6 | -1.6 | -1.6 | 11.9 | 1279.6 | 3.1 |
| 85 1010 1011 | 1288.13 | 1298.0 | 0.0 | -1.6 | 15.4 | 1295.0 | 3.0 |
| 86 1010 1010 | 1303.75 | 1312.0 | 0.9 | 1.0 | 13.9 | 1310.5 | 1.5 |
| 87 1010 1001 | 1319.38 | 1331.0 | 1.4 | 1.4 | 19.0 | 1326.0 | 5.0 |
| 88 1010 1000 | 1335.00 | 1342.5 | -0.9 | -0.9 | 11.5 | 1341.5 | 1.0 |
| 89 1010 0111 | 1350.63 | 1357.4 | -1.6 | -1.6 | 14.9 | 1356.9 | 0.5 |
| 90 1010 0110 | 1366.25 | 1372.5 | 1.0 | -0.0 | 15.1 | 1372.4 | 0.1 |
| 91 1010 0101 | 1381.88 | 1393.0 | -1.3 | 1.5 | 20.5 | 1387.9 | 5.1 |
| 92 1010 0100 | 1397.50 | 1409.8 | -2.1 | -0.6 | 16.7 | 1403.4 | 6.4 |
| 93 1010 0011 | 1413.13 | 1421.7 | -1.6 | -1.6 | 11.9 | 1418.9 | 2.8 |
| 94 1010 0010 | 1428.75 | 1438.7 | -1.0 | -1.0 | 17.0 | 1434.3 | 4.4 |
| 95 1010 0001 | 1444.38 | 1454.5 | 1.5 | 1.5 | 15.8 | 1449.8 | 4.7 |
| 96 1010 0000 | 1460.00 | 1460.9 | 0.9 | 1.0 | 6.3 | 1465.3 | -4.4 |
| 97 1001 1111 | 1475.63 | 1478.9 | -1.5 | -0.1 | 18.0 | 1480.8 | -1.9 |
| 98 1001 1110 | 1491.25 | 1491.4 | -1.0 | -1.0 | 12.5 | 1496.2 | -4.8 |
| 99 1001 1101 | 1506.88 | 1516.6 | 0.1 | -1.7 | 25.1 | 1511.7 | 4.8 |
| 100 1001 1100 | 1522.50 | 1523.2 | 1.5 | 1.5 | 6.6 | 1527.2 | -4.0 |
| 101 1001 1011 | 1538.13 | 1541.7 | 1.5 | 1.5 | 18.5 | 1542.7 | -1.0 |
| 102 1001 1010 | 1553.75 | 1556.6 | -1.0 | -1.0 | 14.9 | 1558.1 | -1.5 |
| 103 1001 1001 | 1569.38 | 1580.5 | -1.5 | -1.6 | 23.8 | 1573.6 | 6.8 |
| 104 1001 1000 | 1585.00 | 1585.4 | 1.0 | -0.1 | 4.9 | 1589.1 | -3.7 |

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OF POOR QUALITY

HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 193

1981/12/01 09:38:24 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.5-H A/D THRESHOLD TEST (BAND= 6, SENSOR=2)

| THRESHOLD
NUMBER | A/D
OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|----------------------------|------------------------|---------------------------|------------------------|--------------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO-
LOWER | 1:1
UPPER | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1601.0 | 1.5 | 1.5 | 15.6 | 1604.6 | -3.6 |
| 106 | 1001 0110 | 1616.25 | 1616.2 | 0.0 | 1.0 | 15.2 | 1620.1 | -3.9 |
| 107 | 1001 0101 | 1631.88 | 1640.0 | -1.7 | -1.8 | 23.8 | 1635.5 | 4.4 |
| 108 | 1001 0100 | 1647.50 | 1650.5 | 1.5 | 1.4 | 10.6 | 1651.0 | -0.5 |
| 109 | 1001 0011 | 1663.13 | 1665.2 | 1.5 | 1.4 | 14.6 | 1666.5 | -1.3 |
| 110 | 1001 0010 | 1678.75 | 1681.4 | 0.9 | 1.0 | 16.2 | 1682.0 | -0.6 |
| 111 | 1001 0001 | 1694.38 | 1701.0 | -1.5 | -0.1 | 19.7 | 1697.4 | 3.6 |
| 112 | 1001 0000 | 1710.00 | 1715.3 | -1.3 | -1.3 | 14.3 | 1712.9 | 2.4 |
| 113 | 1000 1111 | 1725.63 | 1724.8 | 0.0 | 0.7 | 9.4 | 1728.4 | -3.6 |
| 114 | 1000 1110 | 1741.25 | 1737.0 | 0.9 | 0.9 | 12.2 | 1743.9 | -6.9 |
| 115 | 1000 1101 | 1756.88 | 1761.0 | 1.7 | 1.6 | 24.0 | 1759.3 | 1.7 |
| 116 | 1000 1100 | 1772.50 | 1773.2 | -1.6 | -1.5 | 12.2 | 1774.8 | -1.6 |
| 117 | 1000 1011 | 1788.13 | 1789.0 | -1.5 | -1.6 | 15.8 | 1790.3 | -1.3 |
| 118 | 1000 1010 | 1803.75 | 1802.1 | 1.0 | 0.0 | 13.1 | 1805.8 | -3.7 |
| 119 | 1000 1001 | 1819.38 | 1824.8 | -1.5 | 1.5 | 22.7 | 1821.3 | 3.5 |
| 120 | 1000 1000 | 1835.00 | 1834.2 | 0.0 | 0.8 | 9.4 | 1836.7 | -2.5 |
| 121 | 1000 0111 | 1850.63 | 1848.2 | -1.5 | -1.6 | 14.0 | 1852.2 | -4.0 |
| 122 | 1000 0110 | 1866.25 | 1863.4 | -0.9 | -0.9 | 15.2 | 1867.7 | -4.2 |
| 123 | 1000 0101 | 1881.88 | 1884.2 | 1.6 | 1.5 | 20.7 | 1883.2 | 1.0 |
| 124 | 1000 0100 | 1897.50 | 1900.5 | -0.8 | -0.9 | 16.3 | 1898.6 | 1.8 |
| 125 | 1000 0011 | 1913.13 | 1912.2 | -1.5 | -0.1 | 11.7 | 1914.1 | -1.9 |
| 126 | 1000 0010 | 1928.75 | 1928.4 | -0.9 | -0.9 | 16.2 | 1929.6 | -1.2 |
| 127 | 1000 0001 | 1944.38 | 1946.5 | 0.0 | -1.5 | 18.0 | 1945.1 | 1.4 |
| 128 | 1000 0000 | 1960.00 | 1963.2 | 0.4 | 0.2 | 16.8 | 1960.5 | 2.7 |
| 129 | 0111 1111 | 1975.63 | 1976.1 | 1.7 | 1.6 | 12.9 | 1976.0 | 0.1 |
| 130 | 0111 1110 | 1991.25 | 1991.9 | -1.0 | -1.0 | 15.7 | 1991.5 | 0.4 |

ORIGINAL PAGE IS
OF POOR QUALITY

HS-236 THERMATIC MATTER MIX UNIT TEST MODEL 11, LOT S/N 3 PAGE 194

1981/12/01 09:38:24 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

SENSOR=2



UC 01

| THRESHOLD AND OUTPUT
NUMBER | THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--------------------------------|-----------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 131 | 0111 1101 | 2006.88 | 2014.0 | -1.5 | -1.5 | 22.1 | 2007.0 | 7.0 |
| 132 | 0111 1100 | 2022.50 | 2022.8 | 1.3 | -0.1 | 8.7 | 2022.5 | 0.3 |
| 133 | 0111 1011 | 2038.13 | 2040.5 | 1.6 | 1.6 | 17.7 | 2037.9 | 2.5 |
| 134 | 0111 1010 | 2053.75 | 2056.0 | 0.0 | 1.0 | 15.6 | 2053.4 | 2.6 |
| 135 | 0111 1001 | 2069.38 | 2076.5 | 0.9 | 1.0 | 20.4 | 2068.9 | 7.6 |
| 136 | 0111 1000 | 2085.00 | 2081.4 | -0.9 | -0.9 | 5.0 | 2084.4 | -2.9 |
| 137 | 0111 0111 | 2100.63 | 2099.9 | 1.6 | 1.5 | 18.4 | 2099.8 | 0.0 |
| 138 | 0111 0110 | 2116.25 | 2116.6 | 1.0 | 0.9 | 16.8 | 2115.3 | 1.3 |
| 139 | 0111 0101 | 2131.88 | 2135.7 | 1.5 | -0.1 | 19.1 | 2130.8 | 4.9 |
| 140 | 0111 0100 | 2147.50 | 2153.9 | 1.6 | -1.6 | 18.2 | 2146.3 | 7.6 |
| 141 | 0111 0011 | 2163.13 | 2165.5 | 0.0 | -1.6 | 11.6 | 2161.8 | 3.8 |
| 142 | 0111 0010 | 2178.75 | 2181.7 | 0.9 | 0.9 | 16.2 | 2177.2 | 4.5 |
| 143 | 0111 0001 | 2194.38 | 2198.5 | 1.4 | 1.4 | 16.7 | 2192.7 | 5.8 |
| 144 | 0111 0000 | 2210.00 | 2206.7 | -1.1 | -1.1 | 8.2 | 2208.2 | -1.4 |
| 145 | 0110 1111 | 2225.63 | 2223.7 | -1.6 | -1.6 | 17.0 | 2223.7 | 0.1 |
| 146 | 0110 1110 | 2241.25 | 2247.4 | 1.0 | 0.0 | 13.7 | 2239.1 | -1.7 |
| 147 | 0110 1101 | 2256.88 | 2258.3 | 1.4 | 1.4 | 20.9 | 2254.6 | 3.7 |
| 148 | 0110 1100 | 2272.50 | 2271.6 | -0.0 | 1.3 | 13.3 | 2270.1 | 1.5 |
| 149 | 0110 1011 | 2288.13 | 2287.9 | -1.7 | -1.7 | 16.3 | 2285.6 | 2.3 |
| 150 | 0110 1010 | 2303.75 | 2303.3 | -1.0 | 0.9 | 15.4 | 2301.0 | 2.2 |
| 151 | 0110 1001 | 2319.38 | 2322.7 | -0.5 | -0.6 | 19.4 | 2316.5 | 6.1 |
| 152 | 0110 1000 | 2335.00 | 2330.8 | 0.8 | 0.8 | 8.2 | 2332.0 | -1.2 |
| 153 | 0110 0111 | 2350.63 | 2347.0 | -1.5 | -0.0 | 16.2 | 2347.5 | -0.4 |
| 154 | 0110 0110 | 2366.25 | 2363.7 | -0.9 | -0.9 | 16.7 | 2363.0 | 0.8 |
| 155 | 0110 0101 | 2381.88 | 2383.2 | 0.0 | -1.4 | 19.4 | 2378.4 | 4.7 |
| 156 | 0110 0100 | 2397.50 | 2401.0 | 1.5 | 1.4 | 17.9 | 2393.9 | 7.1 |
| 157 | 0110 0011 | 2413.13 | 2409.6 | 1.5 | 1.5 | 8.5 | 2409.4 | 0.2 |

ORIGINAL PAGE 13
OF POOR QUALITY

185-236 THEMATIC MAPPER MUX UNIT TEST MODEL... F11. S/N 3 PAGE 195

1981/12/01 09:38:24 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST CHANNEL = 6+ SENSOR = 2



| THRESHOLD
NUMBER | A/D
THRESHOLD | DIGITAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|------------------|--------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 158 | 0110 0010 | 2428.75 | 2428.8 | -0.9 | -0.9 | 19.2 | 2424.9 | 3.9 |
| 159 | 0110 0001 | 2444.38 | 2440.6 | -0.4 | -0.5 | 11.8 | 2440.3 | 0.2 |
| 160 | 0110 0000 | 2460.00 | 2440.1 | 0.5 | -0.0 | -0.5 | 2455.8 | -15.7 |
| 161 | 0101 1111 | 2475.63 | 2472.5 | -4.0 | 1.3 | 32.4 | 2471.3 | 1.2 |
| 162 | 0101 1110 | 2491.25 | 2480.6 | 0.0 | 1.0 | 8.1 | 2486.8 | -6.2 |
| 163 | 0101 1101 | 2506.88 | 2504.5 | -1.6 | -1.6 | 23.9 | 2502.2 | 2.2 |
| 164 | 0101 1100 | 2522.50 | 2514.4 | -1.4 | -1.6 | 9.9 | 2517.7 | -3.3 |
| 165 | 0101 1011 | 2538.13 | 2531.2 | 1.6 | 1.6 | 16.8 | 2533.2 | -2.0 |
| 166 | 0101 1010 | 2553.75 | 2545.7 | 1.0 | 1.0 | 14.5 | 2548.7 | -3.0 |
| 167 | 0101 1001 | 2569.38 | 2568.9 | -1.4 | -0.1 | 23.2 | 2564.2 | 4.7 |
| 168 | 0101 1000 | 2585.00 | 2573.0 | -0.9 | -0.9 | 4.1 | 2579.6 | -6.6 |
| 169 | 0101 0111 | 2600.63 | 2592.1 | -0.1 | -1.5 | 19.1 | 2595.1 | -3.0 |
| 170 | 0101 0110 | 2616.25 | 2606.3 | 0.9 | 0.9 | 14.2 | 2610.6 | -4.3 |
| 171 | 0101 0101 | 2631.88 | 2626.6 | 1.4 | 1.4 | 20.3 | 2626.1 | 0.5 |
| 172 | 0101 0100 | 2647.50 | 2644.1 | -1.5 | -1.5 | 17.4 | 2641.5 | 2.7 |
| 173 | 0101 0011 | 2663.13 | 2656.2 | -1.5 | -1.5 | 12.1 | 2657.0 | -0.8 |
| 174 | 0101 0010 | 2678.75 | 2671.4 | 1.0 | -0.1 | 17.2 | 2672.5 | -1.1 |
| 175 | 0101 0001 | 2694.38 | 2691.0 | 0.5 | -0.4 | 19.6 | 2688.0 | 3.0 |
| 176 | 0101 0000 | 2710.00 | 2697.0 | 0.0 | 1.2 | 6.0 | 2703.4 | -6.5 |
| 177 | 0100 1111 | 2725.63 | 2719.8 | -1.4 | -1.3 | 22.8 | 2718.9 | 0.9 |
| 178 | 0100 1110 | 2741.25 | 2728.1 | -1.0 | -0.9 | 8.3 | 2734.4 | -6.4 |
| 179 | 0100 1101 | 2756.88 | 2751.5 | 1.3 | 1.2 | 23.4 | 2749.9 | 1.6 |
| 180 | 0100 1100 | 2772.50 | 2765.6 | -2.4 | -2.3 | 14.5 | 2765.4 | 0.2 |
| 181 | 0100 1011 | 2788.13 | 2778.7 | -1.5 | -0.1 | 13.1 | 2780.8 | -2.7 |
| 182 | 0100 1010 | 2803.75 | 2793.3 | -1.0 | -1.0 | 14.6 | 2796.3 | -3.0 |
| 183 | 0100 1001 | 2819.38 | 2814.7 | 0.0 | -1.5 | 21.5 | 2811.8 | 3.0 |

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OF POOR QUALITY

HS 236 THMATIC MATTER MUX UNIT TEST MODEL.. FIT. S/N 3 PAGE 197

1981/12/01 09:38:24 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST NAME: HS 236 THMATIC MATTER MUX UNIT TEST CHANNEL: 4 SENSOR: 2



01 01 01

| THRESHOLD NUMBER | A/D OUTPUT THRESHOLD | IDEAL VALUE (MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE FROM PREV THRESHOLD | BEST FIT STRAIGHT LINE | |
|------------------|----------------------|------------------|---------------------------|---------------------|-----------|------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO- LOWER | 1:1 UPPER | | POINT | DEVIATION |
| 210 | 0010 1110 | 3241.25 | 3224.2 | -1.0 | -1.0 | 13.0 | 3229.7 | -5.5 |
| 211 | 0010 1101 | 3256.88 | 3250.2 | -0.1 | -1.5 | 26.0 | 3245.1 | 5.0 |
| 212 | 0010 1100 | 3272.50 | 3259.8 | -2.1 | -2.1 | 9.6 | 3260.6 | -0.8 |
| 213 | 0010 1011 | 3288.13 | 3274.5 | 1.4 | 1.4 | 14.7 | 3276.1 | -1.6 |
| 214 | 0010 1010 | 3303.75 | 3289.9 | -1.1 | -1.1 | 15.3 | 3291.6 | -1.7 |
| 215 | 0010 1001 | 3319.38 | 3312.5 | -1.5 | -1.5 | 22.6 | 3307.1 | 5.4 |
| 216 | 0010 1000 | 3335.00 | 3315.6 | 0.6 | -0.0 | 3.1 | 3322.5 | -7.0 |
| 217 | 0010 0111 | 3350.63 | 3340.7 | -4.9 | 1.3 | 25.1 | 3338.0 | 2.7 |
| 218 | 0010 0110 | 3366.25 | 3349.9 | -0.0 | 1.0 | 9.2 | 3353.5 | -3.6 |
| 219 | 0010 0101 | 3381.88 | 3375.3 | -4.7 | -1.3 | 25.4 | 3369.0 | 6.3 |
| 220 | 0010 0100 | 3397.50 | 3388.5 | -1.3 | -1.4 | 13.2 | 3384.4 | 4.1 |
| 221 | 0010 0011 | 3413.13 | 3399.1 | 1.5 | 1.4 | 10.5 | 3399.9 | -0.9 |
| 222 | 0010 0010 | 3428.75 | 3415.7 | 0.9 | 1.0 | 16.7 | 3415.4 | 0.3 |
| 223 | 0010 0001 | 3444.38 | 3427.1 | -0.8 | -0.1 | 11.4 | 3430.9 | -3.7 |
| 224 | 0010 0000 | 3460.00 | 3427.1 | -0.8 | -0.8 | 0.0 | 3446.3 | -19.2 |
| 225 | 0001 1111 | 3475.63 | 3463.2 | -0.1 | -1.3 | 36.0 | 3461.8 | 1.4 |
| 226 | 0001 1110 | 3491.25 | 3469.1 | 0.9 | 1.0 | 5.9 | 3477.3 | -8.2 |
| 227 | 0001 1101 | 3506.88 | 3496.1 | 1.2 | 1.4 | 27.0 | 3492.8 | 3.4 |
| 228 | 0001 1100 | 3522.50 | 3501.1 | -1.6 | -1.4 | 4.9 | 3508.3 | -7.2 |
| 229 | 0001 1011 | 3538.13 | 3530.0 | -1.4 | -1.3 | 28.9 | 3523.7 | 6.3 |
| 230 | 0001 1010 | 3553.75 | 3535.0 | 1.0 | 0.0 | 5.0 | 3539.2 | -4.2 |
| 231 | 0001 1001 | 3569.38 | 3558.6 | 1.6 | 1.7 | 23.6 | 3554.7 | 3.9 |
| 232 | 0001 1000 | 3585.00 | 3559.6 | -0.0 | 0.9 | 1.1 | 3570.2 | -10.5 |
| 233 | 0001 0111 | 3600.63 | 3589.3 | -1.5 | -1.3 | 29.6 | 3585.6 | 3.6 |
| 234 | 0001 0110 | 3616.25 | 3597.3 | -1.0 | -0.9 | 8.0 | 3601.1 | -3.8 |
| 235 | 0001 0101 | 3631.88 | 3621.3 | 1.4 | 1.5 | 24.0 | 3616.6 | 4.7 |
| 236 | 0001 0100 | 3647.50 | 3632.0 | -3.0 | 1.7 | 10.6 | 3632.1 | -0.1 |

ORIGINAL PAGE IS
OF POOR QUALITY

HS-216 THERMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 199

1981/12/01 09:44:40 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

THRESHOLD #1 TEST (RAND= 6, SENSOR=3)
SUMMARY

HAC
TEST
S27

CHECK 1) RMS ERROR, 2) THRESHOLD INCREMENT (+/- 0.0 = THRH INC <= 31.2)
THE REMAINING DATA ARE FOR INFORMATION ONLY

BEST FIT STRAIGHT LINE IS: $Y = -15.466X - 21.9MV$

DEVIATION OF SLOPE FROM IDEAL IS: -1.020%

OFFSET IS: -21.9MV

COEFFICIENT OF DETERMINATION IS: $R^2 = .99998060$

ANALOG INPUT DURING DC RESTORE IS: 63.9MV

RMS ERROR = 4.434MV

REQMT: RMS ERROR <= 7.812MV

THRESHOLD INCREMENT MEASUREMENT

| MAXIMUM THRESHOLD # | AVERAGE | MINIMUM THRESHOLD # | STANDARD DEVIATION |
|---------------------|----------|---------------------|--------------------|
| 15.0MVX# 225 | 15.542MV | -0.8MVX# 224 | 5.530MV |

UPPER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

| MAXIMUM THRESHOLD # | AVERAGE | MINIMUM THRESHOLD # | STANDARD DEVIATION |
|---------------------|----------|---------------------|--------------------|
| 1.9MV 164 | -0.273MV | -6.1MV 249 | 1.465MV |

UPPER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

| MAXIMUM THRESHOLD # | AVERAGE | MINIMUM THRESHOLD # | STANDARD DEVIATION |
|---------------------|----------|---------------------|--------------------|
| 2.1MV 228 | -0.029MV | -2.8MV 212 | 1.312MV |

TEST FAILED

Test Failed see F.R. #F4265 Rg 12/1/8

see C.C.H.R.

<L-1 #, line #9

HAC
TEST
S27

ORIGINAL PAGE 13
OF FOUR QUALITY

HS 236 THEMATIC MAPPER MUX UNIT TEST MOD 1.. FLT. S/N 3 PAGE 200

1981/12/01 09:45:01 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

4.5.1.5-13 AND THRESHOLD TEST (BAND= 6, SENSOR=3)

HAC
TEST
527

000101

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDIAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO- 1 : 1
NOMINAL LOWER UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT DEVIATION |
|--|------------------------|---|------------------------------------|---|
|--|------------------------|---|------------------------------------|---|

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | |
|----|-----------|---------|-------|------|------|-------|-------|
| 1 | 1111 1111 | -24.375 | -16.4 | 1.2 | 1.7 | -6.4 | -10.0 |
| 2 | 1111 1110 | -8.750 | 1.1 | -1.1 | 0.0 | 9.0 | -7.9 |
| 3 | 1111 1101 | 6.875 | 20.5 | -1.7 | -1.6 | 24.5 | -4.0 |
| 4 | 1111 1100 | 22.500 | 34.9 | -0.0 | -1.6 | 40.0 | -5.1 |
| 5 | 1111 1011 | 38.125 | 49.5 | 1.6 | 1.7 | 55.4 | -6.0 |
| 6 | 1111 1010 | 53.750 | 66.5 | 1.1 | 1.1 | 70.9 | -4.4 |
| 7 | 1111 1001 | 69.375 | 86.2 | -1.7 | -0.0 | 86.4 | -0.1 |
| 8 | 1111 1000 | 85.000 | 96.1 | -1.1 | -1.1 | 101.8 | -5.7 |
| 9 | 1111 0111 | 100.625 | 110.0 | 1.6 | -0.0 | 117.3 | -7.3 |
| 10 | 1111 0110 | 116.250 | 128.6 | 0.9 | 1.0 | 132.8 | -4.2 |
| 11 | 1111 0101 | 131.875 | 145.1 | -0.0 | 1.6 | 148.2 | -3.1 |
| 12 | 1111 0100 | 147.500 | 164.1 | -1.8 | -1.6 | 163.7 | 0.4 |
| 13 | 1111 0011 | 163.125 | 177.3 | -1.6 | -1.7 | 179.2 | -1.9 |
| 14 | 1111 0010 | 178.750 | 194.9 | 0.9 | 1.0 | 194.6 | 0.3 |
| 15 | 1111 0001 | 194.375 | 210.6 | 1.6 | 1.6 | 210.1 | 0.5 |
| 16 | 1111 0000 | 210.000 | 222.4 | -1.3 | 0.0 | 225.6 | -3.2 |
| 17 | 1110 1111 | 225.625 | 236.2 | -1.6 | -1.6 | 241.0 | -4.8 |
| 18 | 1110 1110 | 241.250 | 252.7 | -0.1 | -1.1 | 256.5 | -3.7 |
| 19 | 1110 1101 | 256.875 | 269.6 | 1.6 | 1.6 | 271.9 | -2.3 |
| 20 | 1110 1100 | 272.500 | 287.0 | 1.6 | 1.7 | 287.4 | -0.4 |
| 21 | 1110 1011 | 288.125 | 301.8 | -1.7 | -1.6 | 302.9 | -1.1 |
| 22 | 1110 1010 | 303.750 | 319.1 | -1.1 | -1.0 | 318.3 | 0.7 |
| 23 | 1110 1001 | 319.375 | 335.1 | 1.6 | 0.0 | 333.8 | 1.3 |
| 24 | 1110 1000 | 335.000 | 348.7 | 1.0 | 1.0 | 349.3 | -0.6 |
| 25 | 1110 0111 | 350.625 | 360.4 | -0.0 | 1.5 | 364.7 | -4.3 |

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OF POOR QUALITY

HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 201
 1981/12/01 09:45:01 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST # 1-1-1-1 AND THRESHOLD TEST (HAND= 6, SENSOR=3)

HAC
TEST
527

DEC 01 '81

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO= 1:1
NOMINAL LOWER UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT DEVIATION |
|--|------------------------|---|------------------------------------|---|
| 26 1110 0110 | 366.250 | 380.7 -1.1 -1.1 | 20.2 | 380.2 0.4 |
| 27 1110 0101 | 381.875 | 397.0 -1.6 -1.6 | 16.3 | 395.7 1.3 |
| 28 1110 0100 | 397.500 | 415.6 1.6 1.5 | 18.6 | 411.1 4.4 |
| 29 1110 0011 | 413.125 | 425.7 1.6 1.6 | 10.1 | 426.6 -0.9 |
| 30 1110 0010 | 428.750 | 446.9 -1.1 -0.0 | 21.1 | 442.1 4.8 |
| 31 1110 0001 | 444.375 | 462.2 -1.6 -1.5 | 15.3 | 457.5 4.6 |
| 32 1110 0000 | 460.000 | 467.5 -0.0 -1.0 | 5.3 | 473.0 -5.5 |
| 33 1101 1111 | 475.625 | 483.6 1.6 1.7 | 16.1 | 488.5 -4.8 |
| 34 1101 1110 | 491.250 | 499.1 1.0 1.0 | 15.5 | 503.9 -4.8 |
| 35 1101 1101 | 506.875 | 520.2 -1.7 -1.6 | 21.1 | 519.4 0.8 |
| 36 1101 1100 | 522.500 | 534.5 -1.7 -1.7 | 14.3 | 534.9 -0.4 |
| 37 1101 1011 | 538.125 | 548.9 1.6 0.0 | 14.4 | 550.3 -1.4 |
| 38 1101 1010 | 553.750 | 565.2 1.0 1.1 | 16.2 | 565.8 -0.6 |
| 39 1101 1001 | 569.375 | 583.7 -0.0 1.6 | 18.6 | 581.3 2.5 |
| 40 1101 1000 | 585.000 | 597.2 -1.1 -1.0 | 13.4 | 596.7 0.5 |
| 41 1101 0111 | 600.625 | 610.6 -1.6 -1.7 | 13.4 | 612.2 -1.6 |
| 42 1101 0110 | 616.250 | 626.5 1.0 1.0 | 16.0 | 627.7 -1.1 |
| 43 1101 0101 | 631.875 | 643.7 1.6 1.6 | 17.2 | 643.1 0.6 |
| 44 1101 0100 | 647.500 | 662.4 -1.7 0.0 | 18.7 | 658.6 3.8 |
| 45 1101 0011 | 663.125 | 675.5 -1.5 -1.5 | 13.1 | 674.1 1.4 |
| 46 1101 0010 | 678.750 | 693.4 0.0 -1.1 | 17.9 | 689.5 3.9 |
| 47 1101 0001 | 694.375 | 708.7 1.5 1.6 | 15.2 | 705.0 3.7 |
| 48 1101 0000 | 710.000 | 723.8 -1.6 -1.6 | 15.1 | 720.5 3.3 |
| 49 1100 1111 | 725.625 | 734.1 -1.6 -1.7 | 10.3 | 735.9 -1.8 |
| 50 1100 1110 | 741.250 | 749.6 -1.1 -1.0 | 15.5 | 751.4 -1.8 |
| 51 1100 1101 | 756.875 | 767.1 1.5 2.0 | 17.5 | 766.9 0.3 |

ORIGINAL PRICE IS
OF POOR QUALITY

HS 236 THEMATIC MAPPER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 202

1981/12/01 09:45:01 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST = 1-5-11 A/D THRESHOLD TEST (CRAND) = 6, SENSOR = 3



000171

| THRESHOLD
NUMBER | A/D
THRESHOLD | OUTPUT | TOTAL | ANALOG INPUT VOLTAGE (MV) | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | |
|---------------------|------------------|--------|---------------|---------------------------|-------|------------------------------------|------------------------|--------|------|
| | | | VALUE
(MV) | LEVELS RATIO = | POINT | | DEVIATION | | |
| | | | | NOMINAL | LOWER | UPPER | | | |
| 52 | 1100 | 1100 | 772.500 | 784.2 | 1.6 | 1.6 | 17.0 | 782.3 | 1.8 |
| 53 | 1100 | 1011 | 788.125 | 797.3 | 0.0 | 1.6 | 13.2 | 797.8 | -0.4 |
| 54 | 1100 | 1010 | 803.750 | 815.3 | -1.0 | -1.0 | 17.9 | 813.2 | 2.0 |
| 55 | 1100 | 1001 | 819.375 | 833.5 | -1.5 | -1.5 | 18.2 | 828.7 | 4.8 |
| 56 | 1100 | 1000 | 835.000 | 847.5 | 1.0 | 1.0 | 14.0 | 844.2 | 3.3 |
| 57 | 1100 | 0111 | 850.625 | 857.0 | 1.5 | 1.5 | 9.4 | 859.6 | -2.7 |
| 58 | 1100 | 0110 | 866.250 | 876.2 | -1.1 | -0.0 | 19.2 | 875.1 | 1.1 |
| 59 | 1100 | 0101 | 881.875 | 893.1 | -1.6 | -1.6 | 16.9 | 890.6 | 2.5 |
| 60 | 1100 | 0100 | 897.500 | 913.0 | -0.0 | -1.5 | 19.9 | 906.0 | 6.9 |
| 61 | 1100 | 0011 | 913.125 | 921.5 | 1.6 | 1.6 | 8.5 | 921.5 | -0.0 |
| 62 | 1100 | 0010 | 928.750 | 940.6 | 1.0 | 1.0 | 19.1 | 937.0 | 3.6 |
| 63 | 1100 | 0001 | 944.375 | 957.5 | -1.6 | -1.6 | 16.9 | 952.4 | 5.1 |
| 64 | 1100 | 0000 | 960.000 | 967.0 | -1.3 | -1.4 | 9.4 | 967.9 | -0.9 |
| | | | | | | | | | |
| 65 | 1011 | 1111 | 975.625 | 983.2 | 1.6 | -0.0 | 16.2 | 983.4 | -0.2 |
| 66 | 1011 | 1110 | 991.250 | 997.6 | 1.0 | 1.0 | 14.4 | 998.8 | -1.2 |
| 67 | 1011 | 1101 | 1006.88 | 1020.6 | -2.9 | -1.3 | 23.0 | 1014.3 | 6.3 |
| 68 | 1011 | 1100 | 1022.50 | 1031.0 | -1.8 | -1.7 | 10.4 | 1029.8 | 1.2 |
| 69 | 1011 | 1011 | 1038.13 | 1049.3 | -1.6 | -1.5 | 18.3 | 1045.2 | 4.1 |
| 70 | 1011 | 1010 | 1053.75 | 1062.9 | 1.1 | 1.1 | 13.6 | 1060.7 | 2.2 |
| 71 | 1011 | 1001 | 1069.38 | 1082.3 | 1.6 | 1.6 | 19.3 | 1076.2 | 6.1 |
| 72 | 1011 | 1000 | 1085.00 | 1091.4 | -1.0 | -0.1 | 9.1 | 1091.6 | -0.2 |
| 73 | 1011 | 0111 | 1100.63 | 1108.8 | -1.6 | -1.6 | 17.4 | 1107.1 | 1.7 |
| 74 | 1011 | 0110 | 1116.25 | 1124.8 | 0.0 | -1.1 | 16.0 | 1122.6 | 2.2 |
| 75 | 1011 | 0101 | 1131.88 | 1144.5 | -1.2 | 1.8 | 19.7 | 1138.0 | 6.5 |
| 76 | 1011 | 0100 | 1147.50 | 1158.0 | -0.8 | -0.7 | 13.5 | 1153.5 | 4.5 |
| 77 | 1011 | 0011 | 1163.13 | 1173.2 | -1.6 | -1.6 | 15.2 | 1169.0 | 4.2 |
| 78 | 1011 | 0010 | 1178.75 | 1190.1 | -1.0 | -1.0 | 16.9 | 1184.4 | 5.6 |

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OF POOR QUALITY

HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FL1. S/N 3 PAGE 203

1981/12/01 09:45:01 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5.3.5-H A/D THRESHOLD TEST (BAND= 6, SENSOR=3)



DEC 01 '81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | DIGITAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|--------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 79 | 1011 0001 | 1194.38 | 1206.1 | 1.6 | -0.0 | 16.0 | 1199.9 | 6.2 |
| 80 | 1011 0000 | 1210.00 | 1215.3 | 1.3 | 1.3 | 9.2 | 1215.4 | -0.0 |
| 81 | 1010 1111 | 1225.63 | 1229.8 | 0.0 | 1.6 | 14.5 | 1230.8 | -1.0 |
| 82 | 1010 1110 | 1241.25 | 1245.8 | -1.1 | -1.1 | 16.0 | 1246.3 | -0.4 |
| 83 | 1010 1101 | 1256.88 | 1268.8 | -1.6 | -1.7 | 22.9 | 1261.8 | 7.0 |
| 84 | 1010 1100 | 1272.50 | 1278.6 | 1.6 | 1.6 | 9.8 | 1277.2 | 1.4 |
| 85 | 1010 1011 | 1288.13 | 1294.1 | 1.7 | 1.7 | 15.5 | 1292.7 | 1.4 |
| 86 | 1010 1010 | 1303.75 | 1311.1 | -1.1 | -0.1 | 17.0 | 1308.1 | 3.0 |
| 87 | 1010 1001 | 1319.38 | 1330.2 | -1.6 | -1.6 | 19.1 | 1323.6 | 6.6 |
| 88 | 1010 1000 | 1335.00 | 1340.7 | -0.0 | -1.0 | 10.5 | 1339.1 | 1.6 |
| 89 | 1010 0111 | 1350.63 | 1353.4 | 1.7 | 1.6 | 12.7 | 1354.5 | -1.1 |
| 90 | 1010 0110 | 1366.25 | 1370.7 | 1.0 | 0.9 | 17.2 | 1370.0 | 0.6 |
| 91 | 1010 0101 | 1381.88 | 1392.5 | -1.6 | -1.6 | 21.9 | 1385.5 | 7.0 |
| 92 | 1010 0100 | 1397.50 | 1406.8 | -1.7 | -1.7 | 14.2 | 1400.9 | 5.8 |
| 93 | 1010 0011 | 1413.13 | 1417.6 | 1.6 | -0.1 | 10.9 | 1416.4 | 1.2 |
| 94 | 1010 0010 | 1428.75 | 1435.8 | 0.9 | 1.0 | 18.2 | 1431.9 | 4.0 |
| 95 | 1010 0001 | 1444.38 | 1452.1 | 0.0 | 1.5 | 16.2 | 1447.3 | 4.7 |
| 96 | 1010 0000 | 1460.00 | 1459.9 | -1.1 | -1.1 | 7.8 | 1462.8 | -2.9 |
| 97 | 1001 1111 | 1475.63 | 1476.5 | -1.7 | -1.7 | 16.6 | 1478.3 | -1.8 |
| 98 | 1001 1110 | 1491.25 | 1488.4 | 1.1 | 1.1 | 11.8 | 1493.7 | -5.4 |
| 99 | 1001 1101 | 1506.88 | 1512.6 | 1.7 | 1.8 | 24.2 | 1509.2 | 3.4 |
| 100 | 1001 1100 | 1522.50 | 1522.1 | -1.6 | -0.0 | 9.5 | 1524.7 | -2.5 |
| 101 | 1001 1011 | 1538.13 | 1540.8 | -1.7 | -1.7 | 18.7 | 1540.1 | 0.7 |
| 102 | 1001 1010 | 1553.75 | 1554.7 | -0.0 | -1.1 | 13.8 | 1555.6 | -0.9 |
| 103 | 1001 1001 | 1569.38 | 1573.6 | 1.6 | 1.6 | 18.9 | 1571.1 | 2.5 |
| 104 | 1001 1000 | 1585.00 | 1583.3 | 1.1 | 1.0 | 9.7 | 1586.5 | -3.2 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FL1. S/N 3 PAGE 205

1981/12/01 09:45:01 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.1.3.5-4 A/D THRESHOLD TEST (BAND= 6, SENSOR=3)

PAG
TEST
S21
00101

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO= 1 : 1 | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|--|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 131 | 0111 1101 | 2006.88 | 2009.6 | -0.2 | 1.6 | 19.9 | 2004.1 | 5.5 |
| 132 | 0111 1100 | 2022.50 | 2020.4 | 1.5 | 1.5 | 10.8 | 2019.6 | 0.8 |
| 133 | 0111 1011 | 2038.13 | 2039.3 | -1.6 | -1.7 | 18.9 | 2035.0 | 4.2 |
| 134 | 0111 1010 | 2053.75 | 2054.7 | -1.1 | -1.1 | 15.4 | 2050.5 | 4.2 |
| 135 | 0111 1001 | 2069.38 | 2072.1 | 1.6 | -0.1 | 17.4 | 2066.0 | 6.2 |
| 136 | 0111 1000 | 2085.00 | 2078.1 | 1.1 | 1.1 | 5.9 | 2081.4 | -3.4 |
| 137 | 0111 0111 | 2100.63 | 2096.9 | -0.0 | 1.6 | 18.9 | 2096.9 | 0.0 |
| 138 | 0111 0110 | 2116.25 | 2115.3 | -1.0 | -1.1 | 18.3 | 2112.4 | 2.9 |
| 139 | 0111 0101 | 2131.88 | 2132.9 | 0.6 | 0.6 | 17.6 | 2127.8 | 5.0 |
| 140 | 0111 0100 | 2147.50 | 2149.4 | -1.5 | 1.5 | 16.5 | 2143.3 | 6.1 |
| 141 | 0111 0011 | 2163.13 | 2161.0 | 1.6 | 1.6 | 11.6 | 2158.8 | 2.3 |
| 142 | 0111 0010 | 2178.75 | 2180.3 | -1.1 | -0.0 | 19.3 | 2174.2 | 6.1 |
| 143 | 0111 0001 | 2194.38 | 2197.1 | -1.7 | -1.6 | 16.8 | 2189.7 | 7.4 |
| 144 | 0111 0000 | 2210.00 | 2203.9 | 0.0 | -1.4 | 6.7 | 2205.2 | -1.3 |
| 145 | 0110 1111 | 2225.63 | 2219.2 | 1.7 | 1.7 | 15.3 | 2220.6 | -1.5 |
| 146 | 0110 1110 | 2241.25 | 2234.9 | 1.1 | 1.1 | 15.7 | 2236.1 | -1.2 |
| 147 | 0110 1101 | 2256.88 | 2256.8 | -1.6 | -1.6 | 21.9 | 2251.6 | 5.2 |
| 148 | 0110 1100 | 2272.50 | 2269.9 | -1.6 | -1.6 | 13.1 | 2267.0 | 2.9 |
| 149 | 0110 1011 | 2288.13 | 2283.3 | 1.6 | -0.0 | 13.4 | 2282.5 | 0.8 |
| 150 | 0110 1010 | 2303.75 | 2300.0 | 1.0 | 1.0 | 16.6 | 2298.0 | 2.0 |
| 151 | 0110 1001 | 2319.38 | 2317.6 | 0.0 | 1.5 | 17.7 | 2313.4 | 4.2 |
| 152 | 0110 1000 | 2335.00 | 2329.0 | -0.9 | -0.8 | 11.4 | 2328.9 | 0.7 |
| 153 | 0110 0111 | 2350.63 | 2344.1 | -1.7 | -1.7 | 15.1 | 2344.4 | -0.2 |
| 154 | 0110 0110 | 2366.25 | 2360.4 | 1.0 | 1.0 | 16.2 | 2359.8 | 0.6 |
| 155 | 0110 0101 | 2381.88 | 2378.8 | -0.3 | -0.3 | 18.4 | 2375.3 | 3.5 |
| 156 | 0110 0100 | 2397.50 | 2395.9 | -1.6 | 0.0 | 17.1 | 2390.7 | 5.2 |
| 157 | 0110 0011 | 2413.13 | 2408.1 | -1.6 | -1.7 | 12.2 | 2406.2 | 1.9 |

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HS-236 TH-MATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 207

1981/12/01 09:45:01 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.5+3.5-4 A/D THRESHOLD TEST (BAND= 6, SENSOR=3)



DL 01 '81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 184 | 0100 1000 | 2835.00 | 2820.6 | -0.8 | -0.0 | 10.6 | 2823.8 | -3.1 |
| 185 | 0100 0111 | 2850.63 | 2834.7 | -1.6 | -1.6 | 14.1 | 2839.3 | -4.5 |
| 186 | 0100 0110 | 2866.25 | 2851.1 | -0.1 | -1.1 | 16.3 | 2854.7 | -3.7 |
| 187 | 0100 0101 | 2881.08 | 2869.1 | 1.6 | 1.6 | 18.1 | 2870.2 | -1.0 |
| 188 | 0100 0100 | 2897.50 | 2884.5 | 1.5 | 1.6 | 15.3 | 2885.6 | -1.2 |
| 189 | 0100 0011 | 2913.13 | 2898.8 | -1.6 | -1.6 | 14.3 | 2901.1 | -2.3 |
| 190 | 0100 0010 | 2928.75 | 2916.2 | -1.0 | -1.0 | 17.4 | 2916.6 | -0.4 |
| 191 | 0100 0001 | 2944.38 | 2926.2 | 0.9 | 0.0 | 10.0 | 2932.0 | -5.8 |
| 192 | 0100 0000 | 2960.00 | 2926.2 | -1.0 | 1.0 | -0.0 | 2947.5 | -21.4 |
| 193 | 0011 1111 | 2975.63 | 2958.9 | -0.0 | 1.7 | 32.7 | 2963.0 | -4.1 |
| 194 | 0011 1110 | 2991.25 | 2973.4 | -1.1 | -1.1 | 14.6 | 2978.4 | -5.0 |
| 195 | 0011 1101 | 3006.88 | 2999.8 | -0.0 | -1.6 | 26.3 | 2993.9 | 5.9 |
| 196 | 0011 1100 | 3022.50 | 3002.3 | 1.4 | 1.4 | 2.5 | 3009.4 | -7.1 |
| 197 | 0011 1011 | 3038.13 | 3023.3 | 1.6 | 1.7 | 21.1 | 3024.8 | -1.5 |
| 198 | 0011 1010 | 3053.75 | 3038.7 | -1.1 | 0.0 | 15.4 | 3040.3 | -1.6 |
| 199 | 0011 1001 | 3069.38 | 3061.3 | -1.3 | -1.4 | 22.5 | 3055.8 | 5.5 |
| 200 | 0011 1000 | 3085.00 | 3061.3 | 0.1 | -1.0 | 0.0 | 3071.2 | -9.9 |
| 201 | 0011 0111 | 3100.63 | 3083.0 | 1.7 | 1.7 | 21.7 | 3086.7 | -3.7 |
| 202 | 0011 0110 | 3116.25 | 3098.6 | -0.0 | 1.1 | 15.6 | 3102.2 | -3.6 |
| 203 | 0011 0101 | 3131.88 | 3120.9 | -1.6 | -1.6 | 22.3 | 3117.6 | 3.2 |
| 204 | 0011 0100 | 3147.50 | 3134.6 | -1.5 | -1.5 | 13.7 | 3133.1 | 1.5 |
| 205 | 0011 0011 | 3163.13 | 3147.5 | 1.6 | -0.1 | 17.9 | 3148.6 | -1.0 |
| 206 | 0011 0010 | 3178.75 | 3164.1 | 1.0 | 1.1 | 16.5 | 3164.0 | 0.0 |
| 207 | 0011 0001 | 3194.38 | 3184.2 | -2.1 | -0.5 | 20.2 | 3179.5 | 4.7 |
| 208 | 0011 0000 | 3210.00 | 3186.8 | -1.4 | -1.4 | 2.5 | 3195.0 | -8.2 |
| 209 | 0010 1111 | 3225.63 | 3213.4 | -5.7 | -1.4 | 26.7 | 3210.4 | 3.0 |

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HS-216 THEMATIC MAPPER MIX UNIT TEST MODEL .. 111. S/N 3 PAGE 208
 1981/12/01 09:45:01 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 3475.63 AND THRESHOLD TEST BAND= 6, SENSIT=3

HAC
TEST
S27

| THRESHOLD
NUMBER | A/D
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE
(MV) | LEVELS RATIO-
NOMINAL LOWER UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT DEVIATION |
|---------------------|------------------|------------------------|------------------------------|--------------------------------------|------------------------------------|---|
| 210 | 0010 1110 | 3241.25 | 3220.2 | 1.0 | 1.1 | 3225.9 -5.7 |
| 211 | 0010 1101 | 3256.88 | 3245.6 | 1.4 | 1.5 | 3241.4 4.2 |
| 212 | 0010 1100 | 3272.50 | 3257.7 | -1.5 | -2.8 | 3256.8 0.9 |
| 213 | 0010 1011 | 3288.13 | 3272.5 | -1.7 | -1.7 | 3272.3 0.2 |
| 214 | 0010 1010 | 3303.75 | 3286.9 | -0.1 | -1.1 | 3267.8 -0.9 |
| 215 | 0010 1001 | 3319.38 | 3307.4 | 1.4 | 1.5 | 3303.2 4.1 |
| 216 | 0010 1000 | 3335.00 | 3311.8 | 0.0 | -0.5 | 3318.7 -6.9 |
| 217 | 0010 0111 | 3350.63 | 3332.2 | -1.7 | -1.6 | 3334.2 -1.9 |
| 218 | 0010 0110 | 3366.25 | 3347.8 | -1.1 | -1.0 | 3349.6 -1.8 |
| 219 | 0010 0101 | 3381.88 | 3367.1 | 1.5 | -0.0 | 3365.1 2.0 |
| 220 | 0010 0100 | 3397.50 | 3383.5 | -2.3 | 1.6 | 3380.6 2.9 |
| 221 | 0010 0011 | 3413.13 | 3395.3 | -0.1 | 1.5 | 3396.0 -0.7 |
| 222 | 0010 0010 | 3428.75 | 3413.6 | -1.1 | -1.1 | 3411.5 2.1 |
| 223 | 0010 0001 | 3444.38 | 3423.9 | -0.0 | -0.9 | 3426.9 -3.1 |
| 224 | 0010 0000 | 3460.00 | 3423.0 | 0.9 | 0.9 | 3442.4 -19.4 |
| 225 | 0001 1111 | 3475.63 | 3458.5 | 1.3 | 1.5 | 3457.9 0.7 |
| 226 | 0001 1110 | 3491.25 | 3466.9 | -1.1 | -0.0 | 3473.3 -6.4 |
| 227 | 0001 1101 | 3506.88 | 3494.2 | -1.6 | -1.5 | 3488.8 5.4 |
| 228 | 0001 1100 | 3522.50 | 3498.0 | 0.0 | 2.1 | 3504.3 -6.3 |
| 229 | 0001 1011 | 3538.13 | 3518.2 | 1.6 | 1.7 | 3519.7 -1.5 |
| 230 | 0001 1010 | 3553.75 | 3531.8 | -0.1 | 1.1 | 3535.2 -4.4 |
| 231 | 0001 1001 | 3569.38 | 3556.6 | -1.9 | -1.8 | 3550.7 5.9 |
| 232 | 0001 1000 | 3585.00 | 3557.4 | -1.0 | -1.1 | 3566.1 -8.8 |
| 233 | 0001 0111 | 3600.63 | 3584.5 | -4.6 | 0.0 | 3581.6 2.9 |
| 234 | 0001 0110 | 3616.25 | 3593.1 | 0.9 | 1.0 | 3597.1 -4.0 |
| 235 | 0001 0101 | 3631.88 | 3617.8 | -0.0 | 1.6 | 3612.5 5.2 |
| 236 | 0001 0100 | 3647.50 | 3629.8 | -1.7 | -1.6 | 3628.0 1.8 |

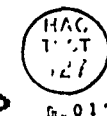
ORIGINAL PAGE 18
OF POOR QUALITY

HAC
TEST
S27
DEC 01 '81
7

HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FL1. S/N 3 PAGE 209

1981/12/01 09:45:01 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

ANALOG INPUT AND THRESHOLD TEST (HAND= 6, SENSOR=3)



| THRESHOLD
NUMBER | A/D
THRESHOLD | OUTPUT
(MV) | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|------------------|----------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 237 | 0001 | 0011 | 3663.13 | 3645.0 | -0.1 | -1.6 | 15.2 | 3643.5 | 1.5 |
| 238 | 0001 | 0010 | 3678.75 | 3659.1 | 1.0 | 1.1 | 14.1 | 3658.9 | 0.2 |
| 239 | 0001 | 0001 | 3694.38 | 3679.9 | 0.0 | 1.5 | 20.8 | 3674.4 | 5.5 |
| 240 | 0001 | 0000 | 3710.00 | 3683.7 | -1.2 | -0.0 | 3.8 | 3689.9 | -6.1 |
| 241 | 0000 | 1111 | 3725.63 | 3709.0 | -1.5 | -1.5 | 25.2 | 3705.3 | 3.6 |
| 242 | 0000 | 1110 | 3741.25 | 3716.7 | -0.1 | -1.1 | 7.7 | 3720.8 | -4.1 |
| 243 | 0000 | 1101 | 3756.88 | 3741.8 | 1.4 | 1.6 | 25.1 | 3736.3 | 5.5 |
| 244 | 0000 | 1100 | 3772.50 | 3752.5 | -4.2 | 1.5 | 10.8 | 3751.7 | 0.8 |
| 245 | 0000 | 1011 | 3788.13 | 3769.2 | -1.7 | -1.5 | 16.7 | 3767.2 | 2.0 |
| 246 | 0000 | 1010 | 3803.75 | 3782.8 | -1.1 | -1.0 | 13.6 | 3782.7 | 0.1 |
| 247 | 0000 | 1001 | 3819.38 | 3807.8 | 0.9 | -0.0 | 25.0 | 3798.1 | 9.6 |
| 248 | 0000 | 1000 | 3835.00 | 3808.9 | 0.8 | 0.6 | 1.1 | 3813.6 | -4.7 |
| 249 | 0000 | 0111 | 3850.63 | 3833.8 | -6.1 | 1.4 | 24.9 | 3829.1 | 4.7 |
| 250 | 0000 | 0110 | 3866.25 | 3844.1 | -1.0 | -1.0 | 10.3 | 3844.5 | -0.4 |
| 251 | 0000 | 0101 | 3881.88 | 3868.9 | -0.2 | -1.5 | 24.7 | 3860.0 | 8.9 |
| 252 | 0000 | 0100 | 3897.50 | 3876.4 | 1.3 | 1.4 | 7.6 | 3875.5 | 1.0 |
| 253 | 0000 | 0011 | 3913.13 | 3893.1 | 1.4 | 1.5 | 16.7 | 3890.9 | 2.2 |
| 254 | 0000 | 0010 | 3928.75 | 3910.5 | -1.1 | 0.1 | 17.4 | 3906.4 | 4.2 |
| 255 | 0000 | 0001 | 3944.38 | 3931.2 | -1.6 | -1.5 | 20.6 | 3921.9 | 9.3 |

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IS 236 THE-MATIC MAPPER MUX UNIT TEST MODEL.. FIT. S/N 3 PAGE 210
 1981/12/01 09:51:25 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 73.25+21.30-11.20 (A/D) THRESHOLD 10 TEST CHAND= 5, SENSOR=4
 13 11 11 11 11 11 11

HAC
TEST
S27
DEC 01 81

CHECK 1) RMS ERROR, 2) THRESHOLD INCREMENT(+/- 0.0 = THRH INC. = 31.2)
 THE REMAINING DATA ARE FOR INFORMATION ONLY

RECEIVED FROM 15TH NOV 1981 15:44:40 -21.3MV

DEVIATION OF SLOPE FROM IDEAL IS: -0.901%
 OFFSET IS:-21.3MV
 COEFFICIENT OF DETERMINATION IS: RXX2= .99998540
 ANALOG INPUT DURING DC RESTORE IS:63.9MV

RECEIVED FROM 4.344MV R-RATE: RMS ERROR <=7.812MV

THRESHOLD INCREMENT PENALTY

| | | | |
|-------------------------------------|---------------------|-------------------------------------|-------------------------------|
| MAXIMUM THRESHOLD #
(39.6MV) 193 | AVERAGE
15.547MV | MINIMUM THRESHOLD #
(-0.2MV) 232 | STANDARD DEVIATION
5.682MV |
|-------------------------------------|---------------------|-------------------------------------|-------------------------------|

OFFER AT OFFER RATIO = 1 : 1

| | | | |
|----------------------------------|---------------------|-----------------------------------|-------------------------------|
| MAXIMUM THRESHOLD #
1.8MV 195 | AVERAGE
-0.252MV | MINIMUM THRESHOLD #
-4.7MV 233 | STANDARD DEVIATION
1.400MV |
|----------------------------------|---------------------|-----------------------------------|-------------------------------|

OFFER AT OFFER RATIO = 1 : 1

| | | | |
|-----------------------------------|---------------------|-----------------------------------|-------------------------------|
| MAXIMUM THRESHOLD #
4.1 MV 220 | AVERAGE
-0.036MV | MINIMUM THRESHOLD #
-2.0MV 196 | STANDARD DEVIATION
1.290MV |
|-----------------------------------|---------------------|-----------------------------------|-------------------------------|

TEST FAILED

*Test failed see FR #F4265 By 12/1/81
 See Q.C.H.R. (HAC TEST)*

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MS 236 THERMATIC POWER MIX UNIT TEST MODEL 11 F11, S/N 3 PAGE 212

1901/12701 09111301 PENALTY TEST UNIT PERFORMANCE @ AMBIENT TEMP.

TEST UNIT NO. 11011301 TEST DATE 11-10-61 TEST TIME 11:00 AM TESTER J. J. JONES

11011301
090101

| THRESHOLD
NUMBER | A/D
THRESHOLD | DIGITAL
VOLTAGE
(MV) | ANALOG INPUT VOLTAGE (MV) | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|------------------|----------------------------|---------------------------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | | POINT | DEVIATION |
| 26 | 1110 0110 | 366.250 | 381.9 | -1.0 | -1.0 | 381.3 | 0.6 |
| 27 | 1110 0101 | 381.875 | 396.5 | -1.5 | -1.6 | 396.8 | -0.3 |
| 28 | 1110 0100 | 397.500 | 412.0 | -1.5 | -1.6 | 412.3 | 4.7 |
| 29 | 1110 0011 | 413.125 | 428.5 | -1.6 | -0.1 | 427.7 | 0.8 |
| 30 | 1110 0010 | 428.750 | 448.1 | -1.0 | -1.0 | 443.2 | 4.9 |
| 31 | 1110 0001 | 444.375 | 463.4 | -0.8 | -1.6 | 458.7 | 4.7 |
| 32 | 1110 0000 | 460.000 | 467.9 | 0.9 | 1.0 | 474.2 | -6.3 |
| 33 | 1101 1111 | 475.625 | 484.9 | 1.6 | 1.6 | 489.7 | -4.8 |
| 34 | 1101 1110 | 491.250 | 501.5 | -1.1 | -1.1 | 505.2 | -3.7 |
| 35 | 1101 1101 | 506.875 | 521.4 | -1.8 | -1.7 | 520.6 | 0.7 |
| 36 | 1101 1100 | 522.500 | 534.4 | -1.5 | -0.1 | 536.1 | -1.8 |
| 37 | 1101 1011 | 538.125 | 550.2 | 1.6 | 1.6 | 551.6 | -1.4 |
| 38 | 1101 1010 | 553.750 | 566.6 | -0.1 | 1.0 | 567.1 | -0.5 |
| 39 | 1101 1001 | 569.375 | 586.7 | -1.7 | -1.7 | 582.6 | 4.1 |
| 40 | 1101 1000 | 585.000 | 598.4 | -1.0 | -1.0 | 598.1 | 0.3 |
| 41 | 1101 0111 | 600.625 | 610.2 | 1.6 | 1.6 | 613.6 | -3.3 |
| 42 | 1101 0110 | 616.250 | 627.9 | 1.0 | 1.0 | 629.0 | -1.1 |
| 43 | 1101 0101 | 631.875 | 646.6 | -1.6 | 0.1 | 644.5 | 2.1 |
| 44 | 1101 0100 | 647.500 | 664.1 | -1.7 | -1.7 | 660.0 | 4.1 |
| 45 | 1101 0011 | 663.125 | 676.9 | -0.1 | -1.7 | 675.5 | 1.4 |
| 46 | 1101 0010 | 678.750 | 693.8 | 1.0 | 1.0 | 691.0 | 2.9 |
| 47 | 1101 0001 | 694.375 | 710.8 | 1.5 | 1.5 | 706.5 | 3.5 |
| 48 | 1101 0000 | 710.000 | 726.2 | -1.3 | -1.4 | 721.9 | 4.3 |
| 49 | 1100 1111 | 725.625 | 735.4 | -1.7 | -1.7 | 737.4 | -2.0 |
| 50 | 1100 1110 | 741.250 | 750.0 | 1.0 | -0.6 | 752.9 | -2.9 |
| 51 | 1100 1101 | 756.875 | 768.4 | 1.5 | 1.6 | 768.4 | -0.0 |

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HS 236 THERMATIC MAPPER BOX UNIT TEST MODEL.. FLT. S/N 3 PAGE 214

1981/12/01 09:51:00 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

13.5.11.55-11 Q/D THRESHOLD TO SET (GND)= 6. SENSOR=4



0114

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(KV) | ANALOG INPUT VOLTAGE (KV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 79 1011 0001 | 1194.38 | 1207.6 | 1.7 | 1.6 | 13.9 | 1202.0 | 5.7 |
| 80 1011 0000 | 1210.00 | 1219.6 | -2.7 | -1.5 | 11.9 | 1217.4 | 2.2 |
| 81 1010 1111 | 1225.63 | 1233.1 | -1.6 | -1.7 | 13.5 | 1232.9 | 0.2 |
| 82 1010 1110 | 1241.25 | 1247.6 | 0.0 | -1.0 | 14.5 | 1248.4 | -0.8 |
| 83 1010 1101 | 1256.88 | 1268.8 | -1.2 | 1.6 | 21.1 | 1263.9 | 4.9 |
| 84 1010 1100 | 1272.50 | 1280.6 | 1.6 | 1.7 | 11.8 | 1279.4 | 1.2 |
| 85 1010 1011 | 1288.13 | 1297.6 | -1.6 | -0.0 | 17.0 | 1294.9 | 2.7 |
| 86 1010 1010 | 1303.75 | 1313.0 | -1.1 | -1.1 | 15.4 | 1310.3 | 2.6 |
| 87 1010 1001 | 1319.38 | 1334.4 | -2.5 | -1.1 | 21.5 | 1325.0 | 8.6 |
| 88 1010 1000 | 1335.00 | 1341.5 | 1.0 | 0.9 | 7.0 | 1341.3 | 0.2 |
| 89 1010 0111 | 1350.63 | 1355.3 | 0.1 | 1.7 | 13.8 | 1356.0 | -1.5 |
| 90 1010 0110 | 1366.25 | 1373.5 | -1.1 | -1.1 | 10.3 | 1372.3 | 1.3 |
| 91 1010 0101 | 1381.88 | 1394.2 | -1.5 | -1.6 | 20.7 | 1387.8 | 6.5 |
| 92 1010 0100 | 1397.50 | 1409.3 | -0.5 | -0.0 | 15.1 | 1403.2 | 6.1 |
| 93 1010 0011 | 1413.13 | 1419.5 | 1.6 | 1.7 | 10.1 | 1418.7 | 0.8 |
| 94 1010 0010 | 1428.75 | 1437.8 | -0.1 | 1.0 | 10.3 | 1434.2 | 3.6 |
| 95 1010 0001 | 1444.38 | 1455.5 | -1.6 | -1.6 | 17.8 | 1449.7 | 5.8 |
| 96 1010 0000 | 1460.00 | 1461.9 | 0.0 | -1.0 | 6.4 | 1465.2 | -3.3 |
| 97 1001 1111 | 1475.63 | 1476.8 | 1.6 | 1.6 | 14.9 | 1480.7 | -3.9 |
| 98 1001 1110 | 1491.25 | 1490.4 | 1.0 | 1.0 | 13.6 | 1496.2 | -5.7 |
| 99 1001 1101 | 1506.88 | 1516.1 | -1.7 | -0.0 | 25.7 | 1511.6 | 4.5 |
| 100 1001 1100 | 1522.50 | 1524.4 | -1.6 | -1.6 | 8.3 | 1527.1 | -2.7 |
| 101 1001 1011 | 1538.13 | 1542.7 | 0.1 | 1.6 | 10.3 | 1542.6 | 0.1 |
| 102 1001 1010 | 1553.75 | 1555.7 | 1.1 | 1.1 | 12.9 | 1558.1 | -2.4 |
| 103 1001 1001 | 1569.38 | 1578.7 | -3.1 | 1.5 | 23.1 | 1573.6 | 5.2 |
| 104 1001 1000 | 1585.00 | 1586.4 | -1.1 | -1.1 | 7.7 | 1589.1 | -2.7 |

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HS 236 THERMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 215

1981/12/01 09:51:38 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

3.1.1.5-4 AND THRESHOLD TEST (HAND= 6, SENSOR=4)

HAG
TEST
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| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1602.1 | -1.5 | -1.6 | 15.7 | 1604.5 | -2.4 |
| 106 | 1001 0110 | 1616.25 | 1616.3 | 1.1 | 0.0 | 14.1 | 1620.0 | -3.8 |
| 107 | 1001 0101 | 1631.88 | 1637.9 | -1.4 | 1.7 | 21.6 | 1635.5 | 2.4 |
| 108 | 1001 0100 | 1647.50 | 1651.7 | -2.8 | -1.3 | 13.8 | 1651.0 | 0.8 |
| 109 | 1001 0011 | 1663.13 | 1666.4 | -1.6 | -1.6 | 14.7 | 1666.5 | -0.0 |
| 110 | 1001 0010 | 1678.75 | 1682.5 | 0.0 | -1.0 | 16.1 | 1682.0 | 0.6 |
| 111 | 1001 0001 | 1694.38 | 1702.3 | -1.5 | 1.3 | 19.7 | 1697.4 | 4.8 |
| 112 | 1001 0000 | 1710.00 | 1713.6 | 1.2 | 1.3 | 11.3 | 1712.9 | 0.6 |
| 113 | 1000 1111 | 1725.63 | 1724.5 | -1.6 | 0.0 | 11.0 | 1728.4 | -3.9 |
| 114 | 1000 1110 | 1741.25 | 1738.2 | -1.1 | -1.1 | 13.7 | 1743.9 | -5.7 |
| 115 | 1000 1101 | 1756.88 | 1762.4 | 0.0 | -1.6 | 24.2 | 1759.4 | 3.0 |
| 116 | 1000 1100 | 1772.50 | 1771.6 | 1.7 | 1.5 | 9.2 | 1774.9 | -3.3 |
| 117 | 1000 1011 | 1788.13 | 1787.2 | 0.0 | 1.5 | 15.6 | 1790.4 | -3.1 |
| 118 | 1000 1010 | 1803.75 | 1803.4 | -1.1 | -1.1 | 16.1 | 1805.0 | -2.5 |
| 119 | 1000 1001 | 1819.38 | 1826.2 | -1.6 | -1.6 | 22.8 | 1821.3 | 4.9 |
| 120 | 1000 1000 | 1835.00 | 1834.4 | 0.9 | -0.1 | 8.2 | 1836.8 | -2.4 |
| 121 | 1000 0111 | 1850.63 | 1846.4 | 1.6 | 1.6 | 12.0 | 1852.3 | -5.9 |
| 122 | 1000 0110 | 1866.25 | 1862.8 | -0.0 | 1.0 | 16.4 | 1867.8 | -5.0 |
| 123 | 1000 0101 | 1881.88 | 1885.7 | -1.7 | -1.8 | 22.9 | 1883.3 | 2.4 |
| 124 | 1000 0100 | 1897.50 | 1899.5 | 0.0 | -1.7 | 13.8 | 1898.7 | 0.7 |
| 125 | 1000 0011 | 1913.13 | 1910.5 | 1.6 | 1.6 | 11.0 | 1914.2 | -3.7 |
| 126 | 1000 0010 | 1928.75 | 1927.8 | 1.0 | 1.0 | 17.3 | 1929.7 | -1.9 |
| 127 | 1000 0001 | 1944.38 | 1946.3 | -1.5 | -0.0 | 18.5 | 1945.2 | 1.1 |
| 128 | 1000 0000 | 1960.00 | 1963.4 | -0.3 | -0.4 | 17.0 | 1960.7 | 2.7 |
| 129 | 0111 1111 | 1975.63 | 1977.7 | 0.1 | -1.6 | 14.3 | 1976.7 | 1.5 |
| 130 | 0111 1110 | 1991.25 | 1991.3 | 1.1 | 1.1 | 13.7 | 1991.6 | -0.3 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. F11. S/N 3 PAGE 217
1981/12/01 09:51:38 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
3.5.3.5-43 A/D THRESHOLD TEST (BAND= 6, SENSOR=4)

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO= 1:1
NOMINAL LOWER UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT DEVIATION |
|---------------------|-------------------------|------------------------|---|------------------------------------|---|
| 158 | 0110 0010 | 2428.75 | 2428.7 1.0 1.0 | 18.8 | 2425.2 3.5 |
| 159 | 0110 0001 | 2444.38 | 2440.4 -0.1 0.4 | 11.7 | 2440.7 -0.3 |
| 160 | 0110 0000 | 2460.00 | 2441.0 -0.5 -0.5 | 0.5 | 2456.2 -15.2 |
| 161 | 0101 1111 | 2475.63 | 2468.9 -1.5 -1.6 | 27.9 | 2471.7 -2.8 |
| 162 | 0101 1110 | 2491.25 | 2481.5 1.0 -0.1 | 12.6 | 2487.1 -5.6 |
| 163 | 0101 1101 | 2506.88 | 2503.2 1.6 1.6 | 21.7 | 2502.6 0.6 |
| 164 | 0101 1100 | 2522.50 | 2515.4 -1.6 -0.1 | 12.2 | 2518.1 -2.7 |
| 165 | 0101 1011 | 2538.13 | 2533.2 -1.6 -1.7 | 17.8 | 2533.6 -0.3 |
| 166 | 0101 1010 | 2553.75 | 2547.7 0.0 -1.1 | 14.4 | 2549.1 -1.4 |
| 167 | 0101 1001 | 2569.38 | 2567.8 1.5 1.5 | 20.1 | 2564.6 3.3 |
| 168 | 0101 1000 | 2585.00 | 2572.9 1.0 1.0 | 5.1 | 2580.0 -7.1 |
| 169 | 0101 0111 | 2600.63 | 2592.5 -1.6 -0.1 | 19.6 | 2595.5 -3.0 |
| 170 | 0101 0110 | 2616.25 | 2608.2 -1.0 -1.0 | 15.7 | 2611.0 -2.8 |
| 171 | 0101 0101 | 2631.88 | 2627.0 1.5 -0.1 | 18.7 | 2626.5 0.5 |
| 172 | 0101 0100 | 2647.50 | 2643.2 1.7 1.6 | 16.2 | 2642.0 1.2 |
| 173 | 0101 0011 | 2663.13 | 2655.1 0.1 1.5 | 11.9 | 2657.5 -2.4 |
| 174 | 0101 0010 | 2678.75 | 2673.4 -1.1 -1.1 | 18.3 | 2673.0 0.5 |
| 175 | 0101 0001 | 2694.38 | 2691.0 0.8 0.8 | 17.6 | 2688.4 7.6 |
| 176 | 0101 0000 | 2710.00 | 2697.2 1.4 0.0 | 6.1 | 2703.9 -6.7 |
| 177 | 0100 1111 | 2725.63 | 2713.4 1.5 1.6 | 16.2 | 2719.4 -6.0 |
| 178 | 0100 1110 | 2741.25 | 2729.2 -1.1 -0.1 | 15.8 | 2734.9 -5.7 |
| 179 | 0100 1101 | 2756.88 | 2753.6 -1.4 -1.4 | 24.4 | 2750.4 3.2 |
| 180 | 0100 1100 | 2772.50 | 2763.8 0.1 2.3 | 10.2 | 2765.9 -2.1 |
| 181 | 0100 1011 | 2788.13 | 2777.6 1.6 1.6 | 13.9 | 2781.3 -3.7 |
| 182 | 0100 1010 | 2803.75 | 2793.3 1.0 1.0 | 15.7 | 2796.8 -3.5 |
| 183 | 0100 1001 | 2819.38 | 2815.3 -1.6 -0.0 | 21.9 | 2812.3 3.0 |

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HS-236 THMATIC MAPPER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 218

1981/12/01 09:51:38 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

THRESHOLD TEST CHANID= 6 SENSOR=4

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TEST
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| THRESHOLD
NUMBER | A/D
OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO-
NOMINAL LOWER UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT DEVIATION | | | |
|---------------------|----------------------------|------------------------|---|------------------------------------|---|------|--------|-------|
| 184 | 0100 1000 | 2835.00 | 2824.7 | -0.8 | -1.0 | 9.4 | 2827.8 | -3.1 |
| 185 | 0100 0111 | 2850.63 | 2837.0 | 1.5 | -0.1 | 12.3 | 2843.3 | -6.3 |
| 186 | 0100 0110 | 2866.25 | 2853.9 | 0.9 | 1.0 | 17.0 | 2858.8 | -4.6 |
| 187 | 0100 0101 | 2881.88 | 2873.0 | 0.0 | 1.5 | 19.1 | 2874.2 | -1.2 |
| 188 | 0100 0100 | 2897.50 | 2894.3 | -1.6 | -1.6 | 21.3 | 2889.7 | 4.6 |
| 189 | 0100 0011 | 2913.13 | 2902.8 | -1.6 | -1.6 | 8.4 | 2905.2 | -2.4 |
| 190 | 0100 0010 | 2928.75 | 2919.2 | 1.0 | 0.0 | 16.4 | 2920.7 | -1.5 |
| 191 | 0100 0001 | 2944.38 | 2930.0 | -0.8 | 1.0 | 10.9 | 2936.2 | -6.2 |
| 192 | 0100 0000 | 2960.00 | 2931.0 | -0.9 | -1.8 | 1.0 | 2951.7 | -20.7 |
| 193 | 0011 1111 | 2975.63 | 2970.6 | -1.6 | -1.6 | 39.6 | 2967.2 | 3.4 |
| 194 | 0011 1110 | 2991.25 | 2977.5 | -0.1 | -1.1 | 6.9 | 2982.6 | -5.1 |
| 195 | 0011 1101 | 3006.88 | 3001.8 | 1.8 | 1.2 | 24.3 | 2998.1 | 3.2 |
| 196 | 0011 1100 | 3022.50 | 3009.7 | -2.1 | -2.0 | 7.9 | 3013.6 | -3.9 |
| 197 | 0011 1011 | 3038.13 | 3029.1 | -1.6 | -0.1 | 19.4 | 3029.1 | -0.0 |
| 198 | 0011 1010 | 3053.75 | 3042.8 | -1.1 | -1.1 | 13.8 | 3044.6 | -1.7 |
| 199 | 0011 1001 | 3069.38 | 3064.1 | 1.2 | -0.1 | 21.2 | 3066.1 | 4.0 |
| 200 | 0011 1000 | 3085.00 | 3064.3 | 1.0 | 1.0 | 0.2 | 3075.5 | -11.2 |
| 201 | 0011 0111 | 3100.63 | 3087.2 | -0.1 | 1.6 | 22.8 | 3091.0 | -3.9 |
| 202 | 0011 0110 | 3116.25 | 3103.9 | -1.1 | -1.1 | 16.7 | 3106.5 | -2.6 |
| 203 | 0011 0101 | 3131.88 | 3125.1 | -1.5 | -1.6 | 21.2 | 3122.0 | 3.1 |
| 204 | 0011 0100 | 3147.50 | 3137.5 | 1.6 | -0.0 | 12.4 | 3137.5 | -0.0 |
| 205 | 0011 0011 | 3163.13 | 3151.8 | 1.4 | 1.5 | 14.4 | 3153.0 | -1.1 |
| 206 | 0011 0010 | 3178.75 | 3169.4 | -1.1 | 0.0 | 17.5 | 3168.4 | 0.9 |
| 207 | 0011 0001 | 3194.38 | 3188.0 | 0.5 | 0.4 | 18.6 | 3183.9 | 4.1 |
| 208 | 0011 0000 | 3210.00 | 3191.0 | 0.0 | -1.5 | 3.0 | 3199.4 | -8.4 |
| 209 | 0010 1111 | 3225.63 | 3216.6 | -4.6 | 1.3 | 25.6 | 3214.9 | 1.7 |

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1981/12/01 09:51:38 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

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HS-236 THEMATIC MAPPER MIX UNIT TEST MODEL.. F11. S/N 3 PAGE 220

1981/12/01 09:51:38 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

C. F. H. I. F. A. I. D. THRESHOLD TEST (HAND-- 6- SENSOR=4)

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO 1:1
NOMINAL LOWER UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT DEVIATION |
|--|------------------------|--|------------------------------------|---|
| 237 0001 0011 | 3663.13 | 3648.4 1.5 1.5 | 13.5 | 3648.5 -0.1 |
| 238 0001 0010 | 3678.25 | 3664.1 1.0 1.0 | 15.7 | 3663.9 0.2 |
| 239 0001 0001 | 3694.38 | 3686.5 -1.6 -1.5 | 27.3 | 3679.4 7.0 |
| 240 0001 0000 | 3710.00 | 3688.7 -1.3 -1.4 | 2.3 | 3694.9 -6.2 |
| 241 0000 1111 | 3725.63 | 3712.9 1.1 -0.1 | 24.2 | 3710.4 2.6 |
| 242 0000 1110 | 3741.25 | 3720.7 1.0 1.0 | 7.7 | 3725.9 -5.2 |
| 243 0000 1101 | 3756.88 | 3746.8 -0.2 1.5 | 26.1 | 3741.4 5.4 |
| 244 0000 1100 | 3772.50 | 3759.6 -1.9 -1.7 | 12.8 | 3756.8 2.8 |
| 245 0000 1011 | 3788.13 | 3774.4 -1.6 -1.6 | 14.7 | 3772.3 2.0 |
| 246 0000 1010 | 3803.75 | 3786.9 0.9 1.1 | 12.5 | 3787.8 -0.9 |
| 247 0000 1001 | 3819.38 | 3812.8 1.0 1.1 | 25.9 | 3803.3 9.5 |
| 248 0000 1000 | 3835.00 | 3814.7 -0.7 -0.0 | 1.9 | 3818.0 -4.0 |
| 249 0000 0111 | 3850.63 | 3840.8 -1.6 -1.5 | 26.1 | 3834.3 6.5 |
| 250 0000 0110 | 3866.25 | 3849.5 -0.1 -1.1 | 8.6 | 3849.7 -0.3 |
| 251 0000 0101 | 3881.88 | 3872.6 1.3 1.4 | 23.1 | 3865.2 7.3 |
| 252 0000 0100 | 3897.50 | 3886.6 -1.1 1.4 | 14.0 | 3880.7 5.9 |
| 253 0000 0011 | 3913.13 | 3899.9 -1.6 -1.5 | 13.3 | 3896.2 3.7 |
| 254 0000 0010 | 3928.75 | 3915.9 -1.1 -1.0 | 16.0 | 3911.7 4.2 |
| 255 0000 0001 | 3944.38 | 3935.1 1.4 0.0 | 19.2 | 3927.2 7.9 |

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Appendix A

Multiplexer Performance Data

A/D THRESHOLD TEST DATA
Band 7

Section 4G

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9.7

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FIG. 2.15. THE HATCH MAPPER BOX UNIT TEST. MODEL 1.1. F.T. 5/28/71. PAGE 224

1901/1/201 091503/2 1100/1/1 1100/1/1 1100/1/1 1100/1/1 1100/1/1 1100/1/1 1100/1/1 1100/1/1 1100/1/1

1100/1/1 1100/1/1 1100/1/1 1100/1/1 1100/1/1 1100/1/1 1100/1/1 1100/1/1 1100/1/1 1100/1/1

| THRESHOLD
NUMBER | ANALOG
THRESHOLD | DIGITAL
THRESHOLD | ANALOG
VALUE
(GV) | ANALOG INPUT VOLTAGE (GV) | | | ANALOG
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|---------------------|----------------------|-------------------------|---------------------------|-------|-------|---------------------|------------------------|-----------|
| | | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 52 | 1100 | 1100 | 222.500 | 209.5 | -1.2 | -1.0 | 23.6 | 225.9 | 0.5 |
| 53 | 1100 | 1011 | 200.125 | 291.2 | -1.0 | -1.0 | 6.8 | 291.0 | -0.5 |
| 54 | 1100 | 1010 | 007.250 | 010.1 | 1.0 | 1.1 | 10.9 | 007.2 | 2.5 |
| 55 | 1100 | 1001 | 012.375 | 026.1 | 0.9 | 1.0 | 15.9 | 023.5 | 2.5 |
| 56 | 1100 | 1000 | 035.000 | 046.9 | -2.1 | 1.2 | 20.0 | 049.4 | 2.5 |
| 57 | 1100 | 0111 | 050.750 | 052.0 | -0.9 | -0.0 | 5.9 | 053.3 | -2.5 |
| 58 | 1100 | 0110 | 066.250 | 072.2 | 0.0 | 1.0 | 19.4 | 071.1 | 1.0 |
| 59 | 1100 | 0101 | 081.075 | 087.2 | 0.9 | 0.9 | 15.5 | 087.0 | 0.2 |
| 60 | 1100 | 0100 | 097.500 | 912.2 | 1.0 | 1.0 | 24.5 | 902.9 | 9.3 |
| 61 | 1100 | 0011 | 913.125 | 917.0 | -0.9 | -0.9 | 5.5 | 918.2 | -1.0 |
| 62 | 1100 | 0010 | 923.750 | 939.6 | -1.0 | 1.0 | 21.9 | 934.6 | 5.0 |
| 63 | 1100 | 0001 | 944.375 | 952.5 | 1.0 | 0.0 | 12.0 | 950.5 | 2.0 |
| 64 | 1100 | 0000 | 960.000 | 964.2 | 1.0 | 1.2 | 11.2 | 966.1 | -2.2 |
| 65 | 1011 | 1111 | 975.625 | 979.0 | 0.0 | 1.0 | 15.2 | 982.2 | -2.4 |
| 66 | 1011 | 1110 | 991.250 | 992.9 | -0.9 | -1.0 | 10.1 | 990.1 | -0.2 |
| 67 | 1011 | 1101 | 1006.000 | 1022.4 | -1.0 | 1.0 | 24.4 | 1014.0 | 0.5 |
| 68 | 1011 | 1100 | 1022.500 | 1035.2 | 1.0 | 1.1 | 12.0 | 1029.0 | 5.4 |
| 69 | 1011 | 1011 | 1030.125 | 1044.9 | 0.9 | 1.0 | 9.2 | 1045.2 | -0.0 |
| 70 | 1011 | 1010 | 1051.750 | 1064.6 | -1.0 | -0.0 | 19.6 | 1061.6 | 3.0 |
| 71 | 1011 | 1001 | 1069.375 | 1081.6 | -1.0 | -1.0 | 12.0 | 1072.4 | 4.1 |
| 72 | 1011 | 1000 | 1085.000 | 1095.4 | 0.1 | -1.0 | 13.9 | 1093.3 | 2.1 |
| 73 | 1011 | 0111 | 1100.625 | 1106.4 | 1.0 | 1.0 | 10.9 | 1109.2 | 2.0 |
| 74 | 1011 | 0110 | 1116.250 | 1125.1 | 1.0 | 1.0 | 10.2 | 1125.0 | 0.0 |
| 75 | 1011 | 0101 | 1131.000 | 1146.4 | 1.0 | 0.9 | 21.3 | 1146.9 | 5.5 |
| 76 | 1011 | 0100 | 1147.500 | 1165.2 | -1.0 | -1.0 | 10.0 | 1156.0 | 0.4 |
| 77 | 1011 | 0011 | 1163.125 | 1171.2 | 0.9 | 0.0 | 6.1 | 1172.6 | -1.4 |
| 78 | 1011 | 0010 | 1179.750 | 1192.6 | 1.0 | 1.0 | 21.1 | 1180.5 | 4.1 |

ORIGINAL PAGE IS
OF POOR QUALITY

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1



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1901/1/201 09:53:22 17 Oct 16 11:51 1001 17.11.18 Received @ 06:11:01 11 Oct.

11.01.81

| ITEM GROUP NUMBER | ITEM GROUP CODE | ITEM CODE | CURRENT MONTHLY RATE | | DIFFER | PERCENT DIFFER | BEST FIT STRAIGHT LINE | |
|-------------------|-----------------|-----------|----------------------|-----------|--------|----------------|------------------------|-----------|
| | | | YEAR 1999 | YEAR 2000 | | | POINT | DEVIATION |
| 105 | 1001 | 0111 | 1601.53 | 1611.6 | 1.0 | 0.0 | 1611.0 | 5.3 |
| 105 | 1001 | 0110 | 1616.25 | 1630.1 | 1.0 | 1.0 | 1632.8 | 2.7 |
| 105 | 1001 | 0101 | 1631.88 | 1650.8 | 0.0 | 0.9 | 1648.2 | 2.1 |
| 105 | 1001 | 0100 | 1642.50 | 1670.4 | -1.1 | 1.1 | 1674.6 | 5.8 |
| 105 | 1001 | 0011 | 1663.13 | 1672.3 | -0.9 | 1.0 | 1680.4 | -3.1 |
| 110 | 1001 | 0010 | 1678.25 | 1692.4 | 1.0 | 1.0 | 1696.3 | 1.1 |
| 111 | 1001 | 0001 | 1694.88 | 1712.1 | 1.0 | 1.0 | 1712.2 | -0.1 |
| 115 | 1001 | 0000 | 1710.00 | 1714.2 | -1.1 | 0.0 | 1728.0 | -6.2 |
| | | | | | | | | |
| 113 | 1000 | 1111 | 1735.63 | 1739.0 | 1.0 | 1.0 | 1743.9 | -5.0 |
| 113 | 1000 | 1110 | 1741.25 | 1755.8 | 0.0 | -1.1 | 1759.8 | -4.0 |
| 115 | 1000 | 1101 | 1756.88 | 1779.2 | 1.0 | 1.0 | 1775.2 | 3.5 |
| 115 | 1000 | 1100 | 1772.50 | 1796.2 | 1.0 | 1.1 | 1791.5 | 4.7 |
| 117 | 1000 | 1011 | 1788.13 | 1803.2 | 1.0 | 1.0 | 1802.4 | -3.2 |
| 113 | 1000 | 1010 | 1801.25 | 1822.2 | 1.0 | -0.9 | 1821.3 | -1.1 |
| 119 | 1000 | 1001 | 1819.88 | 1838.3 | 1.1 | 0.0 | 1839.1 | -0.8 |
| 120 | 1000 | 1000 | 1835.00 | 1859.3 | 0.9 | 1.0 | 1855.0 | 4.3 |
| 121 | 1000 | 0111 | 1850.53 | 1864.0 | 0.1 | 1.0 | 1870.9 | -6.9 |
| 122 | 1000 | 0110 | 1866.25 | 1883.5 | -1.0 | 1.0 | 1886.2 | -3.2 |
| 123 | 1000 | 0101 | 1881.88 | 1904.2 | 0.1 | -1.0 | 1902.6 | 1.6 |
| 124 | 1000 | 0100 | 1892.50 | 1925.2 | 1.1 | 1.1 | 1918.5 | 6.7 |
| 125 | 1000 | 0011 | 1913.13 | 1928.6 | 1.0 | 1.1 | 1934.3 | 5.7 |
| 125 | 1000 | 0010 | 1928.25 | 1950.8 | -1.1 | 0.1 | 1950.2 | 0.6 |
| 127 | 1000 | 0001 | 1944.88 | 1965.3 | 1.0 | -1.0 | 1966.1 | -0.8 |
| 133 | 1000 | 0000 | 1960.00 | 1989.3 | -0.0 | 1.1 | 1981.9 | 7.3 |
| | | | | | | | | |
| 129 | 0111 | 1111 | 1975.63 | 1991.3 | 1.0 | 1.0 | 1997.8 | -6.5 |
| 130 | 0111 | 1110 | 1971.25 | 2002.5 | 0.0 | 1.0 | 2011.2 | -4.2 |

10. 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847. 848. 849. 850. 851. 852. 853. 854. 855. 856. 857. 858. 859. 860. 861. 862. 863. 864. 865. 866. 867. 868. 869. 870. 871. 872. 873. 874. 875. 876. 877. 878. 879. 880. 881. 882. 883. 884. 885. 886. 887. 888. 889. 890. 891. 892. 893. 894. 895. 896. 897. 898. 899. 900. 901. 902. 903. 904. 905. 906. 907. 908. 909. 910. 911. 912. 913. 914. 915. 916. 917. 918. 919. 920. 921. 922. 923. 924. 925. 926. 927. 928. 929. 930. 931. 932. 933. 934. 935. 936. 937. 938. 939. 940. 941. 942. 943. 944. 945. 946. 947. 948. 949. 950. 951. 952. 953. 954. 955. 956. 957. 958. 959. 960. 961. 962. 963. 964. 965. 966. 967. 968. 969. 970. 971. 972. 973. 974. 975. 976. 977. 978. 979. 980. 981. 982. 983. 984. 985. 986. 987. 988. 989. 990. 991. 992. 993. 994. 995. 996. 997. 998. 999. 1000.

| STATION | ELEVATION | ELEVATION | ELEVATION | ELEVATION | ELEVATION | ELEVATION | ELEVATION | BEST FIT STRAIGHT LINE | |
|---------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------------------|-----------|
| | | | | | | | | POINT | DEVIATION |
| 101 | 0111 | 1101 | 2006.388 | 2032.8 | -1.0 | -0.9 | 20.3 | 2029.6 | 3.2 |
| 102 | 0111 | 1100 | 2022.500 | 2042.6 | -1.0 | -1.0 | 16.9 | 2045.4 | 4.2 |
| 103 | 0111 | 1011 | 2038.133 | 2056.3 | 1.0 | -0.0 | 6.7 | 2061.3 | -5.0 |
| 104 | 0111 | 1010 | 2053.25 | 2076.0 | 1.0 | 1.0 | 12.6 | 2077.2 | -1.2 |
| 105 | 0111 | 1001 | 2062.388 | 2091.9 | 0.0 | 1.1 | 15.2 | 2093.0 | -1.1 |
| 106 | 0111 | 1000 | 2081.000 | 2110.4 | -0.2 | -0.8 | 18.5 | 2108.9 | 1.5 |
| 107 | 0111 | 0111 | 2100.633 | 2118.8 | -0.1 | -1.0 | 8.4 | 2124.8 | -5.9 |
| 108 | 0111 | 0110 | 2116.25 | 2132.6 | 1.1 | 1.1 | 18.2 | 2140.6 | -3.1 |
| 109 | 0111 | 0101 | 2131.388 | 2153.2 | 1.1 | 1.0 | 15.6 | 2155.5 | -3.3 |
| 110 | 0111 | 0100 | 2142.500 | 2178.4 | -1.0 | 0.0 | 25.2 | 2172.4 | 6.0 |
| 111 | 0111 | 0011 | 2163.133 | 2184.6 | -0.9 | -0.2 | 5.2 | 2188.2 | -4.2 |
| 112 | 0111 | 0010 | 2178.25 | 2205.3 | 0.1 | -0.2 | 22.2 | 2204.1 | 1.2 |
| 113 | 0111 | 0001 | 2194.388 | 2218.3 | 1.0 | 1.0 | 12.5 | 2220.0 | -1.7 |
| 114 | 0111 | 0000 | 2210.000 | 2236.2 | -1.6 | -0.5 | 12.2 | 2235.9 | 0.3 |
| 115 | 0110 | 1111 | 2251.633 | 2245.3 | 0.2 | -0.9 | 2.1 | 2251.7 | -6.4 |
| 116 | 0110 | 1110 | 2261.25 | 2264.5 | -1.0 | -1.0 | 18.2 | 2262.6 | -4.1 |
| 117 | 0110 | 1101 | 2276.388 | 2284.8 | 1.0 | 0.0 | 21.3 | 2283.5 | 1.3 |
| 118 | 0110 | 1100 | 2292.500 | 2304.3 | 1.1 | 1.1 | 12.6 | 2292.3 | 5.0 |
| 119 | 0110 | 1011 | 2308.133 | 2309.2 | -0.0 | 1.0 | 4.8 | 2315.2 | -6.0 |
| 120 | 0110 | 1010 | 2318.25 | 2329.9 | -1.0 | -1.0 | 20.2 | 2331.1 | -1.1 |
| 121 | 0110 | 1001 | 2319.388 | 2345.6 | 0.1 | -0.2 | 15.2 | 2346.9 | -1.3 |
| 122 | 0110 | 1000 | 2335.000 | 2365.5 | 1.1 | 1.1 | 12.2 | 2362.8 | 2.7 |
| 123 | 0110 | 0111 | 2350.633 | 2370.6 | 1.0 | 1.0 | 5.1 | 2378.2 | -8.1 |
| 124 | 0110 | 0110 | 2366.25 | 2391.4 | -1.1 | -0.0 | 20.2 | 2394.5 | -3.1 |
| 125 | 0110 | 0101 | 2381.388 | 2406.8 | -1.0 | -4.8 | 15.4 | 2410.4 | -3.6 |
| 126 | 0110 | 0100 | 2392.500 | 2433.8 | 0.0 | -1.0 | 22.0 | 2426.4 | 2.6 |
| 127 | 0110 | 0011 | 2413.133 | 2435.3 | 0.2 | 1.0 | 1.5 | 2442.1 | -6.8 |

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185-216 THERMALIC BUFFER MIX UNIT TEST MODEL 11, P/L, S/N 13 PAGE 229
 1981/12/01 09:53:22 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 185-216 THERMALIC BUFFER MIX UNIT TEST MODEL 11, P/L, S/N 13 PAGE 229



| THRESHOLD AND OUTPUT
NUMBER | THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--------------------------------|-----------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 189 | 0100 1000 | 2831.00 | 2874.5 | -0.1 | -1.1 | 23.1 | 2870.6 | 3.9 |
| 189 | 0100 0111 | 2850.63 | 2876.5 | 1.0 | 1.0 | 2.0 | 2886.5 | -9.9 |
| 189 | 0100 0110 | 2866.25 | 2895.9 | -0.1 | 0.9 | 19.4 | 2902.3 | -6.4 |
| 189 | 0100 0101 | 2881.88 | 2918.5 | -1.0 | -0.9 | 22.6 | 2918.2 | 0.3 |
| 189 | 0100 0100 | 2897.50 | 2940.2 | -1.1 | -1.1 | 22.2 | 2934.1 | 6.6 |
| 189 | 0100 0011 | 2913.13 | 2941.4 | 1.0 | 0.0 | 0.7 | 2949.9 | -8.6 |
| 190 | 0100 0010 | 2928.75 | 2963.3 | 1.0 | 0.9 | 22.0 | 2965.8 | -2.5 |
| 191 | 0100 0001 | 2944.38 | 2976.2 | 0.0 | 1.1 | 13.4 | 2981.2 | -4.9 |
| 192 | 0100 0000 | 2960.00 | 2992.1 | -1.2 | -1.1 | 15.4 | 2997.6 | -5.4 |
| 193 | 0011 1111 | 2975.63 | 3005.5 | -0.0 | -1.0 | 13.4 | 3013.4 | -7.9 |
| 194 | 0011 1110 | 2991.25 | 3021.9 | 1.1 | 1.1 | 16.4 | 3029.3 | -7.4 |
| 194 | 0011 1101 | 3006.88 | 3045.3 | 1.0 | 1.1 | 23.4 | 3045.2 | 0.2 |
| 194 | 0011 1100 | 3022.50 | 3062.2 | -1.0 | 0.1 | 17.4 | 3061.0 | 1.2 |
| 194 | 0011 1011 | 3038.13 | 3070.8 | -1.0 | -0.9 | 8.1 | 3076.9 | -6.1 |
| 194 | 0011 1010 | 3053.75 | 3089.2 | -0.1 | -1.1 | 18.8 | 3092.8 | -3.1 |
| 194 | 0011 1001 | 3069.38 | 3105.8 | 0.9 | 1.0 | 16.1 | 3108.6 | -2.9 |
| 200 | 0011 1000 | 3085.00 | 3123.9 | -0.0 | 1.1 | 18.1 | 3124.2 | -0.6 |
| 201 | 0011 0111 | 3100.63 | 3132.2 | -1.0 | -0.9 | 8.8 | 3140.4 | -7.2 |
| 202 | 0011 0110 | 3116.25 | 3151.9 | -1.1 | -1.0 | 19.2 | 3156.2 | -4.4 |
| 203 | 0011 0101 | 3131.88 | 3173.2 | -0.6 | -0.0 | 21.3 | 3172.1 | 1.1 |
| 204 | 0011 0100 | 3147.50 | 3191.0 | 1.0 | 1.1 | 17.8 | 3188.0 | 3.0 |
| 205 | 0011 0011 | 3163.13 | 3192.0 | 0.0 | 1.0 | 6.0 | 3203.8 | -6.8 |
| 206 | 0011 0010 | 3178.75 | 3219.1 | -1.1 | -1.0 | 22.1 | 3219.2 | -0.6 |
| 207 | 0011 0001 | 3194.38 | 3240.6 | -6.2 | -1.0 | 21.6 | 3235.6 | 5.1 |
| 208 | 0011 0000 | 3210.00 | 3245.4 | 1.1 | 1.1 | 5.8 | 3251.5 | 5.0 |
| 209 | 0010 1111 | 3225.63 | 3259.2 | 1.0 | 1.0 | 12.8 | 3267.3 | -8.1 |

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4. 0 - 81

ORIGINAL PAGE 13
OF POOR QUALITY

| TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT |
| 210 | 0010 | 1110 | 3281.25 | 3277.8 | -1.1 | 0.0 | 18.5 | 3281.2 | -5.4 |
| 211 | 0010 | 1101 | 3278.888 | 3301.2 | -1.1 | -1.0 | 23.4 | 3299.1 | 7.1 |
| 212 | 0010 | 1100 | 3277.50 | 3320.6 | 0.1 | 0.9 | 19.4 | 3314.9 | 5.7 |
| 213 | 0010 | 1011 | 3288.13 | 3324.7 | 1.0 | 1.0 | 4.1 | 3330.8 | -6.1 |
| 214 | 0010 | 1010 | 3301.25 | 3343.6 | -0.1 | 1.1 | 18.8 | 3366.7 | 3.1 |
| 215 | 0010 | 1001 | 3319.38 | 3361.8 | -0.9 | -1.1 | 18.2 | 3362.5 | -0.8 |
| 216 | 0010 | 1000 | 3325.00 | 3383.0 | -1.2 | -1.1 | 21.2 | 3328.4 | 4.5 |
| 217 | 0010 | 0111 | 3330.63 | 3386.7 | 1.0 | 0.0 | 3.8 | 3394.3 | -7.5 |
| 218 | 0010 | 0110 | 3346.25 | 3406.1 | 0.9 | 0.8 | 19.3 | 3410.1 | -4.1 |
| 219 | 0010 | 0101 | 3361.88 | 3421.7 | -0.0 | 7.7 | 15.6 | 3426.0 | -4.3 |
| 220 | 0010 | 0100 | 3392.50 | 3450.5 | -1.2 | -1.1 | 28.8 | 3441.9 | 8.6 |
| 221 | 0010 | 0011 | 3413.13 | 3453.3 | 0.0 | -1.0 | 2.8 | 3457.7 | -4.5 |
| 222 | 0010 | 0010 | 3423.25 | 3473.8 | 1.0 | 1.1 | 20.6 | 3473.6 | 0.2 |
| 223 | 0010 | 0001 | 3444.38 | 3495.0 | 0.9 | 1.0 | 21.7 | 3489.5 | 5.5 |
| 224 | 0010 | 0000 | 3460.00 | 3506.4 | -1.4 | -0.2 | 15.4 | 3505.4 | 1.0 |
| | | | | | | | | | |
| 225 | 0001 | 1111 | 3475.63 | 3515.8 | -1.0 | -1.0 | 9.4 | 3521.2 | -5.4 |
| 226 | 0001 | 1110 | 3491.25 | 3517.7 | -2.8 | 1.1 | 21.8 | 3527.1 | 0.6 |
| 227 | 0001 | 1101 | 3506.88 | 3535.8 | 1.0 | 1.1 | 18.1 | 3553.0 | 2.8 |
| 228 | 0001 | 1100 | 3522.50 | 3572.7 | -0.1 | 1.2 | 16.9 | 3568.8 | 3.9 |
| 229 | 0001 | 1011 | 3538.13 | 3581.7 | -1.0 | 0.9 | 9.0 | 3584.7 | -3.0 |
| 230 | 0001 | 1010 | 3553.25 | 3600.4 | -1.1 | -1.0 | 18.7 | 3620.6 | -0.2 |
| 231 | 0001 | 1001 | 3569.38 | 3616.8 | 0.9 | 0.1 | 16.4 | 3616.4 | 0.4 |
| 232 | 0001 | 1000 | 3585.00 | 3639.2 | 0.8 | 1.0 | 22.3 | 3632.3 | 6.8 |
| 233 | 0001 | 0111 | 3588.63 | 3643.1 | 0.0 | 1.0 | 3.9 | 3648.2 | -5.1 |
| 234 | 0001 | 0110 | 3614.25 | 3663.1 | -1.1 | 1.1 | 20.0 | 3664.0 | -0.9 |
| 235 | 0001 | 0101 | 3631.88 | 3685.8 | -0.1 | -0.9 | 22.7 | 3679.9 | 5.9 |
| 236 | 0001 | 0100 | 3642.50 | 3703.1 | 1.0 | 1.1 | 17.3 | 3695.8 | 2.3 |

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DE: 01 '01

| EFFECT NUMBER | AZD EFFECT NUMBER | TOTAL EFFECT VALUE (MV) | | | INCREASE FROM PREVIOUS THRESHOLD | BEST FIT STRAIGHT LINE | | |
|---------------|-------------------|-------------------------|--------------------------|------------|----------------------------------|------------------------|-----------|------|
| | | VALUE (MV) | ANALOG EFFECT VALUE (MV) | DIFFERENCE | | POINT | DEVIATION | |
| 232 | 0001 0011 | 3663.13 | 3708.9 | 1.0 | 1.0 | 5.8 | 3711.7 | -2.8 |
| 233 | 0001 0010 | 3678.75 | 3710.9 | -1.1 | 0.0 | 22.0 | 3727.5 | 3.4 |
| 239 | 0001 0001 | 3694.38 | 3732.8 | -1.1 | -1.0 | 21.9 | 3743.4 | 9.4 |
| 240 | 0001 0000 | 3710.00 | 3769.9 | -0.1 | -1.0 | 17.1 | 3759.9 | 10.7 |
| 241 | 0000 1111 | 3725.63 | 3771.7 | 1.0 | 1.0 | 1.8 | 3775.1 | -3.4 |
| 242 | 0000 1110 | 3741.25 | 3789.0 | -0.2 | 1.0 | 17.3 | 3791.0 | -2.0 |
| 243 | 0000 1101 | 3756.88 | 3813.9 | -1.1 | -0.9 | 24.9 | 3806.9 | 7.0 |
| 244 | 0000 1100 | 3772.50 | 3834.1 | -1.2 | -1.1 | 20.2 | 3822.7 | 11.4 |
| 245 | 0000 1011 | 3788.13 | 3837.7 | 1.0 | 0.1 | 3.6 | 3838.6 | -0.9 |
| 246 | 0000 1010 | 3803.75 | 3856.6 | 0.9 | 1.0 | 18.8 | 3854.5 | 2.1 |
| 247 | 0000 1001 | 3819.38 | 3873.9 | 0.0 | 1.3 | 17.4 | 3870.3 | 3.6 |
| 248 | 0000 1000 | 3835.00 | 3898.5 | -1.1 | 1.1 | 24.6 | 3886.2 | 12.3 |
| 249 | 0000 0111 | 3850.63 | 3901.4 | 0.0 | -0.9 | 2.9 | 3902.1 | -0.7 |
| 250 | 0000 0110 | 3866.25 | 3919.5 | 0.9 | 1.0 | 18.1 | 3917.9 | 1.5 |
| 251 | 0000 0101 | 3881.88 | 3942.4 | 0.3 | 1.0 | 22.9 | 3934.8 | 8.6 |
| 252 | 0000 0100 | 3897.50 | 3965.4 | -1.1 | 0.0 | 23.1 | 3949.7 | 15.8 |
| 253 | 0000 0011 | 3913.13 | 3967.4 | -1.0 | -1.0 | 2.0 | 3965.6 | 1.9 |
| 254 | 0000 0010 | 3928.75 | 3988.9 | -0.2 | -1.0 | 21.5 | 3981.4 | 7.5 |
| 255 | 0000 0001 | 3944.38 | 4009.3 | 0.9 | 1.1 | 20.4 | 3997.3 | 12.0 |

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-236 THEMATIC MAPPER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 237

81/12/01 10:05:04 FINAL 17 TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST RESULTS FOR ANALOG INPUTS SHOULD BE TESTED (BOARD) 7 SENSORS



DC 01 '01

| SENSOR ID AND OUTPUT ORDER | THIS SHOULD | IDEAL VALUE (MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE FROM PREV THIS SHOULD | BEST FIT STRAIGHT LINE | |
|----------------------------|-------------|------------------|---------------------------|-------|-------|--------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1616.6 | 1.1 | 1.1 | 12.4 | 1624.3 | -5.7 |
| 106 | 1001 0110 | 1616.25 | 1637.1 | 1.1 | 1.0 | 18.5 | 1640.2 | -3.0 |
| 107 | 1001 0101 | 1631.88 | 1660.4 | -1.1 | -0.0 | 23.2 | 1656.1 | 4.3 |
| 108 | 1001 0100 | 1647.50 | 1674.8 | -1.1 | -1.0 | 14.4 | 1671.9 | 2.9 |
| 109 | 1001 0011 | 1663.13 | 1684.5 | -0.1 | -1.0 | 9.7 | 1687.8 | -3.2 |
| 110 | 1001 0010 | 1678.75 | 1705.8 | 1.2 | 1.1 | 21.3 | 1703.6 | 2.2 |
| 111 | 1001 0001 | 1694.38 | 1725.6 | -2.4 | 1.1 | 19.8 | 1719.5 | 6.1 |
| 112 | 1001 0000 | 1710.00 | 1739.3 | -1.0 | -1.1 | 13.7 | 1735.3 | 4.0 |
| 113 | 1000 1111 | 1725.63 | 1745.9 | -1.0 | -1.0 | 6.6 | 1751.2 | -5.3 |
| 114 | 1000 1110 | 1741.25 | 1761.8 | 1.0 | -0.1 | 15.9 | 1767.1 | -5.3 |
| 115 | 1000 1101 | 1756.88 | 1785.1 | 0.9 | 1.0 | 23.3 | 1782.9 | 7.2 |
| 116 | 1000 1100 | 1772.50 | 1795.2 | 0.0 | 1.0 | 10.1 | 1798.8 | -3.6 |
| 117 | 1000 1011 | 1788.13 | 1810.8 | -1.0 | -1.0 | 15.6 | 1814.6 | -3.9 |
| 118 | 1000 1010 | 1803.75 | 1830.2 | 0.0 | -1.0 | 19.4 | 1830.5 | -0.3 |
| 119 | 1000 1001 | 1819.38 | 1851.4 | 1.0 | 1.0 | 21.2 | 1846.4 | 5.0 |
| 120 | 1000 1000 | 1835.00 | 1864.1 | 1.1 | 1.1 | 12.8 | 1862.2 | 1.9 |
| 121 | 1000 0111 | 1850.63 | 1872.0 | -1.0 | 0.0 | 7.9 | 1878.1 | -6.1 |
| 122 | 1000 0110 | 1866.25 | 1890.6 | -1.1 | -1.1 | 18.6 | 1895.9 | -3.3 |
| 123 | 1000 0101 | 1881.88 | 1912.7 | 0.0 | -1.1 | 22.0 | 1909.8 | 2.9 |
| 124 | 1000 0100 | 1897.50 | 1928.6 | 1.1 | 1.0 | 15.9 | 1925.7 | 2.9 |
| 125 | 1000 0011 | 1913.13 | 1935.7 | -0.1 | 1.0 | 7.2 | 1941.5 | -1.8 |
| 126 | 1000 0010 | 1928.75 | 1950.0 | -0.9 | -1.0 | 24.2 | 1957.4 | 2.6 |
| 127 | 1000 0001 | 1944.38 | 1978.8 | -1.0 | -1.0 | 18.9 | 1973.2 | 5.6 |
| 128 | 1000 0000 | 1960.00 | 1983.3 | 1.1 | 0.0 | 4.4 | 1989.1 | -1.8 |
| 129 | 0111 1111 | 1975.63 | 1997.9 | 1.0 | 1.0 | 14.6 | 2004.9 | -7.0 |
| 130 | 0111 1110 | 1991.25 | 2016.0 | -0.1 | 1.0 | 18.1 | 2020.8 | -4.8 |

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TR 216 THERMATIC HOTTER MIX UNIT TEST MODEL 1111 SZN 3 PAGE 219
 1981/12/20 10:05:04 PENALTY TEST FUEL PERFORMANCE @ AMBIENT TEMP.



| THERMID
NUMBER | AZD OUTPUT
THERMID | IDEAL
VALUE
(HV) | ANALOG INPUT VOLTAGE (MV) | | INCREASE
FROM 100 V
THERMID | BEST FIT STRAIGHT LINE | | |
|-------------------|-----------------------|------------------------|---------------------------|-------|-----------------------------------|------------------------|-----------|------|
| | | | NOMINAL | LOWER | | POINT | DEVIATION | |
| 150 | 0110 0010 | 2420.75 | 2467.3 | 0.2 | 1.1 | 25.3 | 2464.8 | 2.5 |
| 152 | 0110 0001 | 2444.30 | 2406.2 | -0.6 | -1.1 | 10.9 | 2400.7 | 5.5 |
| 160 | 0110 0000 | 2460.00 | 2494.3 | 0.1 | -1.1 | 0.0 | 2496.6 | -2.5 |
| 161 | 0101 1111 | 2475.63 | 2503.5 | 1.0 | 1.1 | 9.2 | 2512.4 | -8.9 |
| 162 | 0101 1110 | 2491.25 | 2521.2 | 1.0 | 1.0 | 17.7 | 2520.3 | -7.1 |
| 163 | 0101 1101 | 2506.88 | 2543.0 | -1.1 | 0.0 | 22.6 | 2544.1 | -0.3 |
| 164 | 0101 1100 | 2522.50 | 2560.1 | -1.0 | -0.9 | 16.3 | 2560.0 | 0.1 |
| 165 | 0101 1011 | 2538.13 | 2569.5 | 0.0 | -1.0 | 9.4 | 2575.9 | -6.3 |
| 166 | 0101 1010 | 2553.75 | 2588.5 | 1.2 | 1.1 | 19.0 | 2591.7 | -3.2 |
| 167 | 0101 1001 | 2569.38 | 2609.8 | 0.0 | 1.0 | 21.2 | 2607.6 | 2.2 |
| 168 | 0101 1000 | 2585.00 | 2617.8 | 1.0 | 1.0 | 0.0 | 2623.4 | -5.6 |
| 169 | 0101 0111 | 2600.63 | 2631.0 | 1.1 | -1.0 | 13.2 | 2639.3 | -8.3 |
| 170 | 0101 0110 | 2616.25 | 2649.4 | 1.0 | -0.1 | 10.3 | 2655.1 | -5.3 |
| 171 | 0101 0101 | 2631.88 | 2670.0 | 1.1 | 1.1 | 20.6 | 2671.0 | -1.0 |
| 172 | 0101 0100 | 2647.50 | 2686.7 | 0.1 | 1.1 | 16.7 | 2686.9 | -0.2 |
| 173 | 0101 0011 | 2663.13 | 2695.9 | 1.0 | -1.0 | 9.2 | 2702.7 | -6.8 |
| 174 | 0101 0010 | 2678.75 | 2720.0 | -0.0 | 1.1 | 24.1 | 2710.6 | 1.4 |
| 175 | 0101 0001 | 2694.38 | 2737.0 | 0.9 | 0.9 | 17.0 | 2734.4 | 2.6 |
| 176 | 0101 0000 | 2710.00 | 2749.2 | 1.0 | 1.1 | 12.1 | 2750.3 | -1.1 |
| 177 | 0100 1111 | 2725.63 | 2757.4 | -1.0 | 0.1 | 0.2 | 2766.2 | -8.8 |
| 178 | 0100 1110 | 2741.25 | 2775.1 | -1.1 | -1.0 | 17.7 | 2782.0 | -6.9 |
| 179 | 0100 1101 | 2756.88 | 2796.7 | 0.0 | 1.1 | 21.6 | 2797.9 | -1.2 |
| 180 | 0100 1100 | 2772.50 | 2807.8 | 1.0 | 1.1 | 11.1 | 2813.7 | -6.0 |
| 181 | 0100 1011 | 2788.13 | 2821.4 | -0.1 | 1.0 | 13.6 | 2829.6 | -8.2 |
| 182 | 0100 1010 | 2803.75 | 2843.5 | -1.0 | 1.0 | 22.2 | 2845.5 | -1.9 |
| 183 | 0100 1001 | 2819.38 | 2863.9 | -1.1 | -1.0 | 20.3 | 2861.3 | 2.6 |

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105 2 15 THERMIST POWER MUX UNIT TEST MODEL 111 S/N 3 PAGE 241

1901-12201 10:05:04 THERMIST TEST UNIT PERFORMANCE @ AMBIENT TEMP.



010101

| THERMIST AND OUTPUT
NUMBER | THERMIST | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THERMIST | TEST FTI STRAIGHT LINE | |
|-------------------------------|-----------|------------------------|---------------------------|-------|-------|-----------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 210 | 0010 1110 | 3241.25 | 3283.5 | -1.1 | 0.2 | 15.1 | 3289.5 | -6.0 |
| 211 | 0010 1101 | 3256.88 | 3305.2 | -1.1 | 1.0 | 22.2 | 3305.4 | 0.4 |
| 212 | 0010 1100 | 3272.50 | 3323.7 | -6.5 | 0.0 | 18.0 | 3321.2 | 2.5 |
| 213 | 0010 1011 | 3288.13 | 3330.8 | 1.0 | 1.1 | 7.0 | 3337.1 | -6.3 |
| 214 | 0010 1010 | 3303.75 | 3372.5 | -1.1 | 0.0 | 21.2 | 3372.9 | -0.4 |
| 215 | 0010 1001 | 3319.38 | 3373.4 | -1.0 | -1.0 | 20.9 | 3368.0 | 4.6 |
| 216 | 0010 1000 | 3335.00 | 3386.5 | 0.1 | 1.1 | 13.0 | 3384.6 | 1.8 |
| 217 | 0010 0111 | 3350.63 | 3392.8 | 1.0 | 1.0 | 6.4 | 3390.5 | -2.7 |
| 218 | 0010 0110 | 3366.25 | 3412.0 | 0.9 | 1.1 | 19.1 | 3416.4 | -4.4 |
| 219 | 0010 0101 | 3381.88 | 3434.3 | -1.1 | -0.0 | 22.3 | 3432.2 | 2.0 |
| 220 | 0010 0100 | 3397.50 | 3454.2 | -1.0 | -0.9 | 19.9 | 3448.1 | 6.1 |
| 221 | 0010 0011 | 3413.13 | 3458.4 | 1.1 | 0.0 | 4.2 | 3463.9 | -5.6 |
| 222 | 0010 0010 | 3428.75 | 3483.6 | 0.2 | 0.2 | 25.2 | 3479.8 | 3.8 |
| 223 | 0010 0001 | 3444.38 | 3500.9 | -0.2 | 1.0 | 12.3 | 3495.2 | 5.2 |
| 224 | 0010 0000 | 3460.00 | 3514.4 | -1.2 | -1.1 | 13.5 | 3511.5 | 2.9 |
| 225 | 0001 1111 | 3475.63 | 3524.6 | 1.0 | -1.0 | 10.1 | 3527.4 | -2.8 |
| 226 | 0001 1110 | 3491.25 | 3540.2 | -1.0 | -0.0 | 16.1 | 3543.2 | -2.6 |
| 227 | 0001 1101 | 3506.88 | 3560.1 | 0.9 | 1.0 | 19.4 | 3559.1 | 1.0 |
| 228 | 0001 1100 | 3522.50 | 3572.9 | -1.3 | -0.1 | 12.8 | 3575.0 | 3.0 |
| 229 | 0001 1011 | 3538.13 | 3587.2 | -1.1 | -1.0 | 9.7 | 3590.8 | -3.2 |
| 230 | 0001 1010 | 3553.75 | 3602.3 | -0.1 | -1.0 | 19.6 | 3606.2 | 0.6 |
| 231 | 0001 1001 | 3569.38 | 3623.2 | 0.9 | 1.1 | 20.9 | 3622.5 | 5.6 |
| 232 | 0001 1000 | 3585.00 | 3634.8 | 1.1 | 1.2 | 6.6 | 3638.4 | -3.6 |
| 233 | 0001 0111 | 3600.63 | 3650.1 | -1.1 | 3.4 | 15.3 | 3654.2 | -4.2 |
| 234 | 0001 0110 | 3616.25 | 3668.9 | -1.1 | -1.1 | 18.9 | 3670.1 | -1.2 |
| 235 | 0001 0101 | 3631.88 | 3689.2 | 1.0 | 0.0 | 20.2 | 3686.0 | 3.2 |
| 236 | 0001 0100 | 3647.50 | 3706.3 | 1.0 | 1.1 | 12.1 | 3701.8 | 4.5 |

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FIG 2-5 THE ADDED MASTER BOX UNIT TEST MODEL 1111, 3243 PAGE 242

1981/12/01 10:00:00 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

| TEST POINT AND OUTPUT NUMBER | TEST POINT | TEST POINT | ANALOG INPUT VOLTAGE (V) | ANALOG INPUT VOLTAGE (V) | INCREASE FROM PREV TEST POINT | INCREASE FROM PREV TEST POINT | BEST FIT STRAIGHT LINE | |
|------------------------------|------------|------------|--------------------------|--------------------------|-------------------------------|-------------------------------|------------------------|-----------|
| | | | | | | | POINT | DEVIATION |
| 232 | 0001 | 0011 | 3663.13 | 3714.9 | 0.1 | 1.0 | 3717.7 | 2.8 |
| 233 | 0001 | 0010 | 3678.27 | 3739.7 | -1.1 | 1.1 | 3733.5 | 6.2 |
| 234 | 0001 | 0001 | 3694.38 | 3758.4 | -1.1 | -1.0 | 3749.4 | 9.0 |
| 235 | 0001 | 0000 | 3710.00 | 3771.6 | 0.9 | 0.0 | 3765.3 | 6.4 |
| 241 | 0000 | 1111 | 3725.23 | 3780.3 | 1.9 | 1.1 | 3781.1 | -0.9 |
| 242 | 0000 | 1110 | 3741.25 | 3795.6 | -1.1 | 1.9 | 3797.0 | -1.4 |
| 243 | 0000 | 1101 | 3756.88 | 3818.1 | -1.1 | 1.0 | 3812.8 | 5.2 |
| 244 | 0000 | 1100 | 3772.50 | 3829.7 | -0.1 | 1.0 | 3828.7 | 1.0 |
| 245 | 0000 | 1011 | 3788.13 | 3843.6 | 0.9 | 1.0 | 3844.5 | -0.9 |
| 246 | 0000 | 1010 | 3804.75 | 3854.4 | 0.9 | 1.1 | 3850.4 | 4.0 |
| 247 | 0000 | 1001 | 3819.38 | 3866.5 | 1.2 | 0.0 | 3876.3 | 10.2 |
| 248 | 0000 | 1000 | 3835.00 | 3902.0 | -1.1 | 1.1 | 3892.1 | 9.9 |
| 249 | 0000 | 0111 | 3850.63 | 3909.5 | 2.2 | 0.1 | 3908.0 | 1.5 |
| 250 | 0000 | 0110 | 3866.25 | 3925.2 | 1.0 | 1.0 | 3923.8 | 1.4 |
| 251 | 0000 | 0101 | 3881.88 | 3946.6 | 0.1 | 1.1 | 3939.7 | 6.9 |
| 252 | 0000 | 0100 | 3897.50 | 3959.1 | -1.1 | 1.1 | 3955.6 | 13.5 |
| 253 | 0000 | 0011 | 3913.13 | 3973.3 | -1.0 | 1.0 | 3971.4 | 1.9 |
| 254 | 0000 | 0010 | 3928.75 | 3992.7 | 1.0 | 0.2 | 3987.3 | 10.4 |
| 255 | 0000 | 0001 | 3944.38 | 4015.1 | 0.9 | 1.1 | 4003.1 | 12.0 |

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HS 236 THERMATIC MATTER MIX UNIT TEST MODEL.. F11. S/N 3 PAGE 243

1981/12/01 10:11:22 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

THRESHOLD TO FIELD CRAND = 2, SENSOR = 4
S I P P A I S Y



000101

CHECK TO RMS ERROR, 2) THRESHOLD INCREMENT +/- 0.0 = THRESH INC = (31.2)
THE REMAINING DATA ARE FOR INFORMATION ONLY

DEVIATION OF SLOPE FROM IDEAL IS: 1.513%
OFFSET IS: -41.8MV

COEFFICIENT OF DETERMINATION IS: RXX2= .99998630

ANALOG INPUT DURING DC RESTORE IS: 63.8MV

ANALOG INPUT DURING DC RESTORE IS: 63.8MV

REPORT : RMS ERROR = 2.812MV

THRESHOLD TO INCREMENT MEASUREMENT

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 24.8MV | 247 | 15.936MV | 3.5MV | 189 | 5.141MV |

COEFFICIENT OF DETERMINATION AT OUTPUT LEVEL IS RATIO = 1 : 1

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 1.4MV | 242 | -0.080MV | -0.3MV | 80 | .804MV |

COEFFICIENT OF DETERMINATION AT OUTPUT LEVEL IS RATIO = 1 : 1

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|---------|---------|-------------|--------------------|
| 3.0MV | 112 | 0.049MV | -1.7MV | 77 | .723MV |

TEST PASSED

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10-2-76 DMMGIC MGPTR MIX UNIT TEST MODEL... FFL 5-8-3 PAGE 246

190121201 1011:41 DENSITY TEST FUEL PREDETERMINED & AMBIENT TEMP.

10-2-76 1011:41 1011:41 1011:41 1011:41 1011:41 1011:41 1011:41 1011:41 1011:41 1011:41

| THRESHOLD AND OUTPUT
NUMBER | THRESHOLD | TOTAL
VOLTAGE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--------------------------------|-----------|--------------------------|---------------------------|--------|-----------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | ERROR | (PERCENT) | | POINT | DEVIATION |
| 52 | 1100 | 1100 | 777.500 | 785.4 | -0.9 | -0.9 | 787.0 | 2.4 |
| 53 | 1100 | 1011 | 783.125 | 793.7 | -0.6 | 0.6 | 798.9 | -0.2 |
| 54 | 1100 | 1010 | 807.750 | 817.0 | 0.6 | 0.6 | 814.8 | 2.2 |
| 55 | 1100 | 1001 | 819.375 | 833.7 | 0.5 | 0.6 | 830.6 | 3.1 |
| 56 | 1100 | 1000 | 837.000 | 851.3 | -0.7 | -0.0 | 846.5 | 5.3 |
| 57 | 1100 | 0111 | 850.625 | 860.2 | -0.6 | -0.6 | 862.3 | -2.1 |
| 58 | 1100 | 0110 | 866.250 | 878.5 | 0.0 | -0.3 | 878.2 | 0.3 |
| 59 | 1100 | 0101 | 881.875 | 893.3 | 0.7 | 2.1 | 894.1 | 4.2 |
| 60 | 1100 | 0100 | 897.500 | 917.6 | 0.6 | 0.7 | 909.9 | 7.7 |
| 61 | 1100 | 0011 | 913.125 | 925.1 | -0.5 | -0.5 | 925.8 | -0.6 |
| 62 | 1100 | 0010 | 928.750 | 946.0 | -0.7 | -0.7 | 941.7 | 4.3 |
| 63 | 1100 | 0001 | 944.375 | 960.1 | 0.0 | 0.0 | 957.5 | 2.6 |
| 64 | 1100 | 0000 | 960.000 | 971.6 | 0.6 | 0.7 | 973.4 | -1.8 |
| | | | | | | | | |
| 65 | 1011 | 1111 | 975.625 | 987.4 | 0.0 | 0.6 | 989.2 | -1.9 |
| 66 | 1011 | 1110 | 991.250 | 1004.0 | -0.7 | 0.8 | 1005.1 | -1.1 |
| 67 | 1011 | 1101 | 1006.875 | 1023.5 | 5.6 | -0.7 | 1021.0 | 7.5 |
| 68 | 1011 | 1100 | 1022.500 | 1040.9 | 0.6 | 0.6 | 1036.8 | 4.0 |
| 69 | 1011 | 1011 | 1038.125 | 1052.4 | 0.6 | 0.7 | 1052.7 | -0.3 |
| 70 | 1011 | 1010 | 1053.750 | 1070.4 | -0.7 | 0.0 | 1068.5 | 1.8 |
| 71 | 1011 | 1001 | 1069.375 | 1083.5 | -0.6 | 3.4 | 1084.4 | 4.1 |
| 72 | 1011 | 1000 | 1085.000 | 1100.2 | 0.0 | -1.7 | 1100.3 | -0.1 |
| 73 | 1011 | 0111 | 1100.625 | 1113.9 | 0.5 | 0.6 | 1116.1 | -2.3 |
| 74 | 1011 | 0110 | 1116.250 | 1131.4 | 0.3 | 0.7 | 1132.0 | -0.5 |
| 75 | 1011 | 0101 | 1131.875 | 1155.3 | -0.7 | 0.6 | 1147.9 | 7.5 |
| 76 | 1011 | 0100 | 1147.500 | 1170.1 | -0.3 | -0.7 | 1163.7 | 5.9 |
| 77 | 1011 | 0011 | 1163.125 | 1183.8 | 0.6 | 0.9 | 1179.3 | -0.8 |
| 78 | 1011 | 0010 | 1178.750 | 1198.7 | 0.3 | 0.3 | 1195.4 | 3.3 |

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DEC 01 '81

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QUALITY

| THRESHOLD
NUMBER | ADD OUTPUT
THRESHOLD | INPUT
VALUE
(MV) | ANALOG INPUT VOL TAG
LEVELS RATIO
NOMINAL LOWER | (MV)
1:1
UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT DEVIATION | | |
|---------------------|-------------------------|------------------------|---|----------------------|------------------------------------|---|--------|------|
| 131 | 0111 1101 | 2006.88 | 2038.8 | -0.7 | -0.6 | 23.4 | 2036.1 | 2.7 |
| 132 | 0111 1100 | 2022.50 | 2054.2 | -0.6 | -0.6 | 15.3 | 2052.0 | 2.2 |
| 133 | 0111 1011 | 2038.13 | 2063.3 | 0.6 | 0.0 | 9.2 | 2067.8 | -4.5 |
| 134 | 0111 1010 | 2053.75 | 2081.5 | 0.6 | 0.7 | 18.2 | 2083.7 | -2.2 |
| 135 | 0111 1001 | 2069.38 | 2104.6 | 0.0 | 0.6 | 23.1 | 2099.5 | 5.1 |
| 136 | 0111 1000 | 2085.00 | 2112.3 | -0.7 | -0.6 | 7.6 | 2115.4 | -3.1 |
| 137 | 0111 0111 | 2100.63 | 2125.4 | -0.6 | -0.5 | 13.1 | 2131.3 | -5.9 |
| 138 | 0111 0110 | 2116.25 | 2143.5 | 0.7 | 0.7 | 18.1 | 2147.1 | -3.6 |
| 139 | 0111 0101 | 2131.88 | 2165.2 | 0.7 | 0.9 | 21.7 | 2163.0 | 2.2 |
| 140 | 0111 0100 | 2147.50 | 2182.8 | -0.7 | 0.0 | 17.6 | 2178.8 | 4.0 |
| 141 | 0111 0011 | 2163.13 | 2190.3 | -0.5 | -0.5 | 7.4 | 2194.7 | -4.4 |
| 142 | 0111 0010 | 2178.75 | 2211.5 | -0.0 | -0.7 | 21.3 | 2210.6 | 1.0 |
| 143 | 0111 0001 | 2194.38 | 2231.6 | 0.7 | 0.6 | 20.0 | 2226.4 | 5.1 |
| 144 | 0111 0000 | 2210.00 | 2242.4 | 0.8 | 0.9 | 10.8 | 2242.3 | 0.1 |
| 145 | 0110 1111 | 2225.63 | 2251.9 | -0.6 | -0.6 | 9.5 | 2258.2 | -6.3 |
| 146 | 0110 1110 | 2241.25 | 2269.0 | -0.8 | 0.7 | 17.1 | 2274.0 | -5.0 |
| 147 | 0110 1101 | 2256.88 | 2291.0 | 0.7 | 0.1 | 22.0 | 2289.9 | 1.2 |
| 148 | 0110 1100 | 2272.50 | 2303.0 | 0.8 | 0.8 | 11.9 | 2305.7 | -2.8 |
| 149 | 0110 1011 | 2288.13 | 2316.2 | 0.0 | 0.6 | 13.2 | 2321.6 | -5.4 |
| 150 | 0110 1010 | 2303.75 | 2335.2 | -0.7 | 0.6 | 19.0 | 2337.5 | -2.2 |
| 151 | 0110 1001 | 2319.38 | 2358.0 | -0.6 | -0.6 | 22.8 | 2353.3 | 4.7 |
| 152 | 0110 1000 | 2335.00 | 2367.3 | 0.9 | 3.5 | 9.3 | 2369.2 | -1.9 |
| 153 | 0110 0111 | 2350.63 | 2377.5 | 0.6 | 0.6 | 10.2 | 2385.0 | -7.5 |
| 154 | 0110 0110 | 2366.25 | 2397.0 | -0.7 | 0.0 | 19.5 | 2400.9 | -3.9 |
| 155 | 0110 0101 | 2381.88 | 2418.7 | -0.9 | 0.1 | 21.7 | 2416.8 | 1.9 |
| 156 | 0110 0100 | 2397.50 | 2438.3 | 0.0 | -0.7 | 19.4 | 2432.6 | 5.7 |
| 157 | 0110 0011 | 2413.13 | 2442.4 | 0.6 | 0.6 | 4.1 | 2448.5 | -6.1 |

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| IR SOURCE
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(mV) | ANALOG INPUT VOLTAGE
NOMINAL | INPUT VOLTAGE
TYPICAL RATIO-
LOWER | (MOV)
1:1
DIFFER | INCREASE
FROM THE V
THRESHOLD | BEST FIT STRAIGHT LINE
POINT | DEVIATION |
|---------------------|-------------------------|------------------------|---------------------------------|--|------------------------|-------------------------------------|---------------------------------|-----------|
| 158 | 0110 0010 | 2428.75 | 2463.5 | 0.7 | 0.7 | 21.1 | 2464.3 | -0.8 |
| 159 | 0110 0001 | 2444.38 | 2484.7 | -0.45 | -0.5 | 21.1 | 2480.7 | -4.4 |
| 160 | 0110 0000 | 2460.00 | 2494.2 | -0.6 | -0.6 | 9.6 | 2496.1 | -6.8 |
| 161 | 0101 1111 | 2475.63 | 2503.9 | 0.6 | 0.0 | 9.7 | 2511.9 | -8.0 |
| 162 | 0101 1110 | 2491.25 | 2520.8 | 0.7 | 0.7 | 16.9 | 2527.8 | -7.0 |
| 163 | 0101 1101 | 2506.88 | 2543.3 | 0.0 | 0.6 | 22.5 | 2543.7 | -0.3 |
| 164 | 0101 1100 | 2522.50 | 2560.2 | -0.6 | -0.6 | 16.8 | 2559.5 | 0.7 |
| 165 | 0101 1011 | 2538.13 | 2569.5 | -0.6 | -0.6 | 9.4 | 2575.4 | -5.8 |
| 166 | 0101 1010 | 2553.75 | 2586.7 | 0.6 | 0.7 | 17.2 | 2591.2 | -4.5 |
| 167 | 0101 1001 | 2569.38 | 2609.9 | 0.6 | 0.7 | 23.2 | 2607.1 | 2.8 |
| 168 | 0101 1000 | 2585.00 | 2621.1 | -4.1 | 0.0 | 11.2 | 2623.0 | -1.9 |
| 169 | 0101 0111 | 2600.63 | 2631.0 | -0.6 | -0.6 | 9.8 | 2638.8 | -7.9 |
| 170 | 0101 0110 | 2616.25 | 2649.5 | 0.0 | -0.8 | 18.5 | 2654.7 | -5.2 |
| 171 | 0101 0101 | 2631.88 | 2670.3 | 0.8 | 0.8 | 20.8 | 2670.5 | -0.2 |
| 172 | 0101 0100 | 2647.50 | 2687.8 | 0.0 | 0.8 | 17.5 | 2686.4 | 1.4 |
| 173 | 0101 0011 | 2663.13 | 2695.9 | -0.6 | -0.6 | 8.0 | 2702.3 | -6.4 |
| 174 | 0101 0010 | 2678.75 | 2716.4 | -0.6 | 0.6 | 20.6 | 2718.1 | -1.7 |
| 175 | 0101 0001 | 2694.38 | 2736.8 | 0.6 | 0.0 | 20.4 | 2734.0 | 2.9 |
| 176 | 0101 0000 | 2710.00 | 2750.0 | 0.6 | 0.6 | 13.1 | 2739.9 | 0.1 |
| 177 | 0100 1111 | 2725.63 | 2756.8 | 0.0 | 0.6 | 6.8 | 2765.7 | -8.9 |
| 178 | 0100 1110 | 2741.25 | 2774.2 | -0.7 | 0.7 | 17.4 | 2781.6 | -7.4 |
| 179 | 0100 1101 | 2756.88 | 2796.9 | -0.0 | 0.6 | 22.7 | 2797.4 | -0.6 |
| 180 | 0100 1100 | 2772.50 | 2808.5 | 0.3 | 0.7 | 11.6 | 2813.3 | -4.8 |
| 181 | 0100 1011 | 2788.13 | 2821.7 | 0.6 | 0.7 | 13.3 | 2829.2 | -7.4 |
| 182 | 0100 1010 | 2803.75 | 2840.6 | 0.7 | 0.0 | 18.8 | 2845.0 | -4.5 |
| 183 | 0100 1001 | 2819.38 | 2863.5 | -0.6 | 0.6 | 22.9 | 2860.9 | 2.6 |

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| REFLECTION NUMBER | AC/D OUTPUT THRESHOLD | IDEAL VALUE (MV) | ANALOG INPUT VOLTAGE- FEEDBACK RATIO- NOMINAL | INPUT VOLTAGE- LOWER | (FV) 1 : 1 DIFFER | INCREASE FROM REF V THRESHOLD | BEST FIT STRAIGHT LINE POINT | DEVIATION |
|-------------------|-----------------------|------------------|---|----------------------|-------------------|-------------------------------|------------------------------|-----------|
| 184 | 0100 1000 | 2835.00 | 2838.1 | 0.0 | 0.8 | 14.6 | 2836.7 | 1.3 |
| 185 | 0100 0111 | 2850.63 | 2883.2 | 0.6 | 0.7 | 5.2 | 2892.6 | -9.4 |
| 186 | 0100 0119 | 2866.25 | 2901.7 | -0.1 | 0.6 | 18.5 | 2908.5 | -6.7 |
| 187 | 0100 0101 | 2881.88 | 2924.1 | -0.6 | -0.5 | 22.3 | 2924.3 | -0.3 |
| 188 | 0100 0100 | 2897.50 | 2944.7 | -0.6 | 0.6 | 20.6 | 2940.2 | 4.5 |
| 189 | 0100 0011 | 2913.13 | 2948.2 | 0.6 | 0.0 | 3.5 | 2956.1 | -7.9 |
| 190 | 0100 0010 | 2928.75 | 2969.2 | 0.6 | 0.6 | 21.0 | 2971.9 | -2.7 |
| 191 | 0100 0001 | 2944.38 | 2989.9 | 0.0 | 0.7 | 20.7 | 2987.8 | 2.1 |
| 192 | 0100 0000 | 2960.00 | 2997.9 | -0.7 | -0.6 | 7.9 | 3003.6 | -5.8 |
| | | | | | | | | |
| 193 | 0011 1111 | 2975.63 | 3011.7 | -0.0 | -0.6 | 13.8 | 3019.5 | -7.8 |
| 194 | 0011 1110 | 2991.25 | 3029.1 | 0.7 | 0.7 | 17.4 | 3035.4 | -6.2 |
| 195 | 0011 1101 | 3006.88 | 3050.6 | 0.6 | 0.8 | 21.5 | 3051.2 | -0.6 |
| 196 | 0011 1100 | 3022.50 | 3066.8 | -0.7 | -0.1 | 16.2 | 3067.1 | -0.3 |
| 197 | 0011 1011 | 3038.13 | 3077.1 | -0.6 | -0.6 | 10.2 | 3082.9 | -5.9 |
| 198 | 0011 1010 | 3053.75 | 3094.5 | -0.0 | -0.7 | 17.4 | 3098.8 | -4.3 |
| 199 | 0011 1001 | 3069.38 | 3117.8 | 0.6 | 0.7 | 23.3 | 3114.7 | 3.2 |
| 200 | 0011 1000 | 3085.00 | 3128.8 | 0.1 | 0.8 | 10.9 | 3130.5 | -1.7 |
| 201 | 0011 0111 | 3100.63 | 3138.9 | -0.6 | -0.6 | 10.1 | 3146.4 | -7.5 |
| 202 | 0011 0110 | 3116.25 | 3157.2 | -0.8 | -0.8 | 18.2 | 3162.2 | -5.1 |
| 203 | 0011 0101 | 3131.88 | 3178.6 | 0.6 | -0.0 | 21.4 | 3178.1 | 0.5 |
| 204 | 0011 0100 | 3147.50 | 3195.5 | 0.8 | 0.8 | 16.9 | 3194.0 | 1.5 |
| 205 | 0011 0011 | 3163.13 | 3203.6 | -0.0 | 0.7 | 8.1 | 3209.8 | -6.2 |
| 206 | 0011 0010 | 3178.75 | 3224.2 | -0.7 | -0.7 | 20.6 | 3225.7 | -1.5 |
| 207 | 0011 0001 | 3194.38 | 3246.3 | -0.1 | -0.6 | 22.0 | 3241.5 | 4.7 |
| 208 | 0011 0000 | 3210.00 | 3279.7 | 0.7 | 0.2 | 13.4 | 3272.4 | 2.3 |
| | | | | | | | | |
| 209 | 0010 1111 | 3225.63 | 3265.7 | 0.6 | 0.7 | 6.0 | 3273.3 | -7.6 |

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| THRESHOLD
NUMBER | ASD
THRESHOLD | THRESHOLD
(dB) | ADDITIONAL
NUMBER | THRESHOLD
NUMBER | THRESHOLD
NUMBER | THRESHOLD
NUMBER | THRESHOLD
NUMBER | THRESHOLD
NUMBER | THRESHOLD
NUMBER |
|---------------------|------------------|-------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 210 | 0010 | 1110 | 3241.2% | 3241.0 | -0.2 | -0.0 | 12.1 | 3249.1 | -6.1 |
| 211 | 0010 | 1101 | 3256.000 | 3306.0 | 0.2 | 0.2 | 21.0 | 3305.0 | -1.0 |
| 212 | 0010 | 1100 | 3272.500 | 3312.03 | 0.0 | 0.2 | 11.2 | 3320.9 | -7.1 |
| 213 | 0010 | 1011 | 3288.143 | 3331.13 | 0.6 | 0.6 | 11.5 | 3336.2 | -5.4 |
| 214 | 0010 | 1010 | 3301.125 | 3348.13 | 0.0 | 0.2 | 12.5 | 3352.6 | -3.3 |
| 215 | 0010 | 1001 | 3319.500 | 3373.55 | 0.2 | -0.6 | 21.6 | 3368.4 | -5.0 |
| 216 | 0010 | 1000 | 3335.000 | 3385.9 | -1.2 | 1.1 | 11.4 | 3389.3 | -2.5 |
| 217 | 0010 | 0111 | 3350.663 | 3393.13 | 0.6 | 0.0 | 6.5 | 3400.2 | -6.0 |
| 218 | 0010 | 0110 | 3365.225 | 3411.6 | 0.6 | 0.2 | 18.1 | 3416.0 | -4.4 |
| 219 | 0010 | 0101 | 3381.100 | 3433.13 | 0.0 | 0.2 | 21.2 | 3431.9 | -1.9 |
| 220 | 0010 | 0100 | 3392.500 | 3449.5 | 0.3 | 0.6 | 20.2 | 3442.11 | -6.2 |
| 221 | 0010 | 0011 | 3413.13 | 3459.55 | 0.0 | 0.6 | 5.0 | 3463.6 | -4.1 |
| 222 | 0010 | 0010 | 3433.25 | 3479.4 | 0.5 | 0.6 | 19.31 | 3479.55 | -0.1 |
| 223 | 0010 | 0001 | 3449.500 | 3500.9 | 0.6 | 0.3 | 21.6 | 3495.3 | -5.6 |
| 224 | 0010 | 0000 | 3450.000 | 3514.2 | -0.2 | 0.0 | 13.2 | 3511.2 | -3.0 |
| | | | | | | | | | |
| 225 | 0001 | 1111 | 3475.54 | 3521.13 | -0.6 | 0.5 | 2.6 | 3522.1 | -5.2 |
| 226 | 0001 | 1110 | 3491.225 | 3542.6 | -1.0 | -0.2 | 20.2 | 3542.9 | -0.3 |
| 227 | 0001 | 1101 | 3505.183 | 3560.13 | 0.6 | 0.5 | 18.2 | 3561.13 | -2.0 |
| 228 | 0001 | 1100 | 3522.500 | 3572.0 | 0.0 | 0.2 | 16.2 | 3574.6 | -2.1 |
| 229 | 0001 | 1011 | 3538.143 | 3582.13 | -0.2 | 0.6 | 10.31 | 3590.55 | -2.2 |
| 230 | 0001 | 1010 | 3551.125 | 3601.0 | -0.2 | 0.2 | 20.1 | 3606.4 | -1.6 |
| 231 | 0001 | 1001 | 3569.500 | 3623.13 | 0.5 | 0.0 | 20.13 | 3622.2 | -6.5 |
| 232 | 0001 | 1000 | 3585.000 | 3649.9 | 1.4 | 1.2 | 11.1 | 3648.1 | -1.3 |
| 233 | 0001 | 0111 | 3600.663 | 3649.55 | 0.0 | 0.6 | 9.2 | 3654.0 | -4.4 |
| 234 | 0001 | 0110 | 3616.225 | 3661.13 | 0.2 | 0.2 | 13.31 | 3669.13 | -1.5 |
| 235 | 0001 | 0101 | 3631.100 | 3690.55 | 0.1 | 0.6 | 12.2 | 3685.2 | -4.3 |
| 236 | 0001 | 0100 | 3642.500 | 3702.4 | 0.5 | 0.2 | 16.9 | 3701.55 | -5.9 |

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HSV 236 THERMATIC MAPPER BOX UNIT TEST MODEL . . . LT. S/N 3 PAGE 255

1201/12/01 10:18:17 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST RESULTS: 1-16 GOOD 17-25 POOR 26-31 POOR 32-35 POOR 36-40 POOR 41-45 POOR 46-50 POOR 51-55 POOR 56-60 POOR 61-65 POOR 66-70 POOR 71-75 POOR 76-80 POOR 81-85 POOR 86-90 POOR 91-95 POOR 96-100 POOR

527

01/01/01

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
NOMINAL | INVERTED RATIO
LOWER | INVERTED RATIO
UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT | DEVIATION |
|--|------------------------|--------------------------------------|-------------------------|-------------------------|------------------------------------|---------------------------------|-----------|
|--|------------------------|--------------------------------------|-------------------------|-------------------------|------------------------------------|---------------------------------|-----------|

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | |
|----|-----------|---------|-------|------|------|-------|------|
| 1 | 1111 1111 | -24.375 | -31.8 | -1.7 | -0.7 | -24.7 | -7.1 |
| 2 | 1111 1110 | -8.750 | -14.5 | -0.9 | -0.9 | -8.8 | -5.7 |
| 3 | 1111 1101 | 6.875 | 8.5 | 0.7 | 0.9 | 7.0 | 1.5 |
| 4 | 1111 1100 | 22.500 | 20.8 | 0.8 | 0.9 | 22.3 | -2.0 |
| 5 | 1111 1011 | 38.125 | 34.2 | -0.9 | 0.0 | 38.4 | -4.5 |
| 6 | 1111 1010 | 53.750 | 52.6 | -0.8 | -0.9 | 54.6 | 2.0 |
| 7 | 1111 1001 | 69.375 | 75.2 | -0.1 | -0.8 | 72.6 | 4.0 |
| 8 | 1111 1000 | 85.000 | 80.9 | 0.8 | 0.8 | 85.7 | -5.4 |
| 9 | 1111 0111 | 100.625 | 95.4 | 0.8 | 0.9 | 102.2 | -6.8 |
| 10 | 1111 0110 | 116.250 | 115.2 | -0.9 | -0.8 | 119.8 | -2.9 |
| 11 | 1111 0101 | 131.875 | 137.2 | -0.9 | -0.8 | 133.9 | -3.3 |
| 12 | 1111 0100 | 147.500 | 151.1 | 0.8 | -0.0 | 151.9 | 1.4 |
| 13 | 1111 0011 | 163.125 | 161.1 | 0.9 | 0.9 | 165.6 | -4.5 |
| 14 | 1111 0010 | 178.750 | 182.3 | -0.1 | 0.8 | 181.5 | 0.9 |
| 15 | 1111 0001 | 194.375 | 198.0 | 0.9 | -0.9 | 197.3 | 0.7 |
| 16 | 1111 0000 | 210.000 | 214.0 | -0.9 | -0.9 | 213.2 | 0.8 |
| 17 | 1110 1111 | 225.625 | 223.2 | 0.8 | 0.9 | 229.0 | -3.9 |
| 18 | 1110 1110 | 241.250 | 240.4 | 0.8 | 0.9 | 244.9 | -4.5 |
| 19 | 1110 1101 | 256.875 | 265.0 | -0.9 | 0.0 | 260.8 | -4.3 |
| 20 | 1110 1100 | 272.500 | 275.6 | -1.0 | 0.9 | 276.6 | -1.0 |
| 21 | 1110 1011 | 288.125 | 289.8 | -0.1 | -0.9 | 292.5 | -2.6 |
| 22 | 1110 1010 | 303.750 | 307.6 | 0.8 | 0.8 | 308.3 | -0.7 |
| 23 | 1110 1001 | 319.375 | 330.0 | 0.8 | 0.8 | 324.2 | -5.8 |
| 24 | 1110 1000 | 335.000 | 341.0 | -1.0 | -1.0 | 340.1 | 0.9 |
| 25 | 1110 0111 | 350.625 | 351.8 | 0.9 | -0.9 | 355.9 | -4.1 |

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105.2% THE 66100 AMPER MAX UNIT TEST MODEL 1.11.1. S/N 3 PAGE 2/2

1981212701 10:18:12 10000Y TEST UNIT PERFORMANCE & CONTENT TEMP.

10000Y TEST UNIT PERFORMANCE & CONTENT TEMP. 10000Y TEST UNIT PERFORMANCE & CONTENT TEMP.

| TESTER | UNIT | TEST | UNIT | UNIT | UNIT | UNIT | UNIT | BEST FIT STRAIGHT LINE | |
|--------|------|------|----------|--------|------|------|------|------------------------|-----------|
| | | | | | | | | POINT | DEVIATION |
| 52 | 1100 | 1100 | 777.500 | 785.1 | -0.9 | -1.0 | 11.6 | 784.1 | 0.9 |
| 53 | 1100 | 1011 | 788.125 | 792.2 | -0.9 | -0.9 | 14.1 | 800.0 | -0.8 |
| 54 | 1100 | 1010 | 803.250 | 816.4 | 0.8 | 0.0 | 12.2 | 815.8 | 0.5 |
| 55 | 1100 | 1001 | 819.375 | 839.3 | 0.7 | 0.8 | 22.9 | 831.7 | 7.6 |
| 56 | 1100 | 1000 | 835.000 | 851.4 | 0.0 | 0.9 | 12.1 | 842.6 | 3.8 |
| 57 | 1100 | 0111 | 850.625 | 860.7 | -0.9 | -0.8 | 9.3 | 853.4 | -2.8 |
| 58 | 1100 | 0110 | 866.250 | 879.3 | -0.8 | 0.9 | 18.7 | 879.3 | 0.1 |
| 59 | 1100 | 0101 | 881.875 | 900.6 | 0.8 | 0.9 | 21.3 | 895.1 | 5.5 |
| 60 | 1100 | 0100 | 897.500 | 917.9 | 0.7 | 0.8 | 17.3 | 911.0 | 6.9 |
| 61 | 1100 | 0011 | 913.125 | 925.7 | -0.9 | 0.0 | 7.8 | 916.9 | -1.2 |
| 62 | 1100 | 0010 | 928.750 | 945.9 | -0.9 | 0.9 | 21.2 | 942.7 | -4.2 |
| 63 | 1100 | 0001 | 944.375 | 965.3 | -0.1 | -0.9 | 18.4 | 958.6 | 6.8 |
| 64 | 1100 | 0000 | 960.000 | 974.3 | -1.5 | 0.9 | 9.0 | 974.4 | -0.1 |
| 65 | 1011 | 1111 | 975.625 | 987.4 | 0.9 | 0.9 | 13.1 | 990.3 | -2.9 |
| 66 | 1011 | 1110 | 991.250 | 1004.7 | -0.8 | 0.9 | 12.3 | 1006.1 | -1.4 |
| 67 | 1011 | 1101 | 1006.880 | 1028.9 | -0.9 | -0.9 | 24.2 | 1022.0 | 6.9 |
| 68 | 1011 | 1100 | 1022.500 | 1040.7 | 0.8 | -0.1 | 11.7 | 1037.9 | 2.8 |
| 69 | 1011 | 1011 | 1038.125 | 1052.6 | 0.9 | 0.9 | 11.9 | 1053.7 | -1.2 |
| 70 | 1011 | 1010 | 1053.750 | 1069.5 | 0.0 | 0.8 | 12.0 | 1069.6 | -0.1 |
| 71 | 1011 | 1001 | 1069.375 | 1095.5 | -0.8 | -0.9 | 25.9 | 1085.4 | 10.0 |
| 72 | 1011 | 1000 | 1085.000 | 1099.9 | -0.8 | -0.9 | 4.4 | 1101.3 | -1.4 |
| 73 | 1011 | 0111 | 1100.625 | 1114.0 | 0.9 | 0.9 | 14.1 | 1117.2 | -3.2 |
| 74 | 1011 | 0110 | 1116.250 | 1132.1 | 0.8 | 0.9 | 18.1 | 1131.0 | -0.9 |
| 75 | 1011 | 0101 | 1131.875 | 1155.8 | -0.9 | 0.0 | 23.7 | 1148.9 | 6.9 |
| 76 | 1011 | 0100 | 1147.500 | 1170.0 | -1.0 | -1.0 | 14.2 | 1164.7 | 5.3 |
| 77 | 1011 | 0011 | 1163.125 | 1179.8 | 0.0 | -0.8 | 9.8 | 1180.6 | -0.8 |
| 78 | 1011 | 0010 | 1178.750 | 1198.7 | 0.8 | 0.8 | 18.9 | 1196.5 | 2.2 |

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| TEST SHEET
NUMBER | AND SHEET
NUMBER | TEST
VALUE
(NO) | ANALOG
NOMINAL | INPUT OUTPUT
TOLERANCE
POWER | (NO)
TEST
ORDER | LOCK-STEP
FROM FIRST
TEST SHEET | BEST FIT STRAIGHT LINE
POINT
DEVIATION | |
|----------------------|---------------------|-----------------------|-------------------|------------------------------------|-----------------------|---------------------------------------|--|------|
| 79 | 1011 0001 | 1194.38 | 1271.3 | 0.8 | 0.8 | 22.6 | 1212.3 | 9.0 |
| 80 | 1011 0000 | 1210.00 | 1278.4 | -1.0 | -1.0 | 7.1 | 1278.2 | 0.2 |
| 81 | 1010 1111 | 1225.63 | 1241.1 | -0.9 | -0.9 | 12.7 | 1244.0 | -2.9 |
| 82 | 1010 1110 | 1241.25 | 1256.8 | 0.8 | -0.1 | 15.7 | 1259.9 | -3.1 |
| 83 | 1010 1101 | 1256.88 | 1280.9 | 0.8 | 0.8 | 24.0 | 1275.8 | 1.1 |
| 84 | 1010 1100 | 1272.50 | 1290.3 | -0.0 | 1.0 | 9.5 | 1291.6 | -1.3 |
| 85 | 1010 1011 | 1288.13 | 1306.1 | -0.8 | 0.8 | 15.8 | 1307.35 | -1.3 |
| 86 | 1010 1010 | 1301.25 | 1323.3 | -0.9 | -0.9 | 17.2 | 1323.3 | 0.0 |
| 87 | 1010 1001 | 1319.38 | 1347.4 | 0.8 | 0.8 | 24.1 | 1339.2 | 8.2 |
| 88 | 1010 1000 | 1335.00 | 1355.7 | 1.0 | 1.1 | 8.3 | 1355.1 | 0.6 |
| 89 | 1010 0111 | 1350.63 | 1367.5 | -0.9 | 0.0 | 11.8 | 1370.9 | -3.5 |
| 90 | 1010 0110 | 1366.25 | 1385.7 | -0.9 | -0.9 | 18.3 | 1386.8 | -1.0 |
| 91 | 1010 0101 | 1381.88 | 1408.4 | 0.0 | -0.9 | 22.7 | 1402.6 | 5.8 |
| 92 | 1010 0100 | 1397.50 | 1425.1 | 0.8 | 0.9 | 16.7 | 1418.5 | 6.6 |
| 93 | 1010 0011 | 1413.13 | 1431.4 | 0.9 | 0.9 | 6.3 | 1434.3 | -2.9 |
| 94 | 1010 0010 | 1428.75 | 1455.1 | -0.9 | 0.7 | 23.7 | 1450.2 | 4.9 |
| 95 | 1010 0001 | 1441.38 | 1474.7 | -0.9 | -0.8 | 19.5 | 1466.1 | 8.6 |
| 96 | 1010 0000 | 1450.00 | 1483.6 | 1.1 | 0.0 | 8.9 | 1481.9 | 1.7 |
| 97 | 1001 1111 | 1475.63 | 1492.8 | 0.9 | 0.9 | 9.2 | 1497.8 | -4.9 |
| 98 | 1001 1110 | 1491.25 | 1509.0 | -0.1 | 0.7 | 16.1 | 1513.6 | -4.7 |
| 99 | 1001 1101 | 1506.88 | 1534.1 | -0.9 | 0.9 | 25.1 | 1529.5 | 4.6 |
| 100 | 1001 1100 | 1522.50 | 1547.0 | -0.9 | -0.9 | 12.9 | 1545.4 | 1.6 |
| 101 | 1001 1011 | 1538.13 | 1567.8 | 0.8 | 0.9 | 10.8 | 1561.2 | -3.4 |
| 102 | 1001 1010 | 1553.75 | 1574.5 | 0.9 | 0.9 | 16.7 | 1577.1 | -2.6 |
| 103 | 1001 1001 | 1569.38 | 1600.5 | -0.8 | 6.1 | 26.0 | 1592.9 | 7.6 |
| 104 | 1001 1000 | 1585.00 | 1607.0 | -1.0 | -1.0 | 6.5 | 1608.8 | -1.8 |

1981/12/01 10:18:17 FINAL Y TEST FILE PRELIMINARY @ ANSITERI TFM.

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| THRESHOLD
NUMBER | AZD OUTPUT
THRESHOLD | IN AI
VALUE
(MV) | ANALOG INPUT VOLTAGE
LEVELS RATIO | | (MV)
1 : 1
DIFFER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|--------------------------------------|-------|-------------------------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1619.9 | 0.0 | -0.9 | 12.9 | 1624.7 | -4.7 |
| 106 | 1001 0110 | 1616.25 | 1632.1 | 0.9 | 0.8 | 12.1 | 1640.5 | -3.4 |
| 107 | 1001 0101 | 1631.98 | 1659.9 | 0.9 | 0.9 | 22.8 | 1656.4 | 3.5 |
| 108 | 1001 0100 | 1647.50 | 1675.7 | -0.9 | -1.0 | 15.8 | 1672.2 | 3.5 |
| 109 | 1001 0011 | 1663.13 | 1684.9 | -0.9 | -0.8 | 9.2 | 1688.1 | -3.2 |
| 110 | 1001 0010 | 1678.75 | 1705.7 | -1.4 | -0.1 | 20.8 | 1704.0 | 1.7 |
| 111 | 1001 0001 | 1694.38 | 1726.6 | 0.8 | 0.7 | 20.9 | 1719.8 | 6.8 |
| 112 | 1001 0000 | 1710.00 | 1739.3 | -0.0 | 0.9 | 12.7 | 1735.7 | 3.6 |
| 113 | 1000 1111 | 1725.63 | 1752.7 | -0.9 | 0.9 | 13.4 | 1751.5 | 1.2 |
| 114 | 1000 1110 | 1741.25 | 1762.5 | -0.9 | -1.0 | 9.8 | 1767.4 | -4.9 |
| 115 | 1000 1101 | 1756.88 | 1785.7 | 0.8 | 0.8 | 24.2 | 1783.3 | 2.5 |
| 116 | 1000 1100 | 1772.50 | 1795.3 | 1.0 | 1.0 | 9.6 | 1799.1 | -3.8 |
| 117 | 1000 1011 | 1788.13 | 1811.2 | -0.9 | 0.0 | 15.9 | 1815.0 | -4.7 |
| 118 | 1000 1010 | 1803.75 | 1828.2 | -0.9 | -0.8 | 16.9 | 1830.8 | -2.7 |
| 119 | 1000 1001 | 1819.38 | 1853.0 | 0.0 | -0.8 | 24.8 | 1846.7 | 6.3 |
| 120 | 1000 1000 | 1835.00 | 1864.7 | 1.0 | 0.9 | 11.7 | 1862.5 | 2.2 |
| 121 | 1000 0111 | 1850.63 | 1871.5 | 0.9 | 1.0 | 6.8 | 1878.4 | -6.9 |
| 122 | 1000 0110 | 1866.25 | 1890.4 | -0.9 | -0.9 | 18.9 | 1894.3 | -3.8 |
| 123 | 1000 0101 | 1881.88 | 1913.1 | -0.9 | -0.8 | 22.7 | 1910.1 | 3.0 |
| 124 | 1000 0100 | 1897.50 | 1930.6 | 0.9 | -0.0 | 12.4 | 1926.0 | 4.6 |
| 125 | 1000 0011 | 1913.13 | 1936.4 | 0.9 | 0.9 | 5.8 | 1941.8 | -5.5 |
| 126 | 1000 0010 | 1928.75 | 1959.1 | -2.7 | 0.7 | 22.7 | 1957.7 | 1.4 |
| 127 | 1000 0001 | 1944.38 | 1979.6 | -0.7 | -0.8 | 20.4 | 1973.6 | 6.0 |
| 128 | 1000 0000 | 1960.00 | 1984.2 | -1.0 | -1.0 | 4.7 | 1989.4 | -5.2 |
| 129 | 0111 1111 | 1975.63 | 1998.5 | 0.9 | 0.9 | 14.3 | 2005.3 | -6.8 |
| 130 | 0111 1110 | 1991.25 | 2016.9 | 0.6 | 0.6 | 18.4 | 2021.1 | -4.3 |

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18. 10. 81

18. 10. 81

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FR. 1.3. DYNAMIC COMPUTER AUX UNIT TEST MODEL 1.1 F.T. 13/12/73 PAGE 264

1981/12/01 10:18:12 PLASMA TEST TUBE PERFORMANCE % TESTED TUBE.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

| TEST TUBE AND OUTPUT NUMBER | TEST TUBE | TEST TUBE | IDEAL VALUE (V) | ANALOG INPUT VOLTAGE NOMINAL | INPUT VOLTAGE TUBE RATIO | (V) 1:1 OUTPUT | INCREASE FROM PREV TEST TUBE | BEST FIT STRAIGHT LINE | |
|-----------------------------|-----------|-----------|-----------------|------------------------------|--------------------------|----------------|------------------------------|------------------------|-----------|
| | | | | | | | | POINT | DEVIATION |
| 237 | 0001 | 0011 | 3683.13 | 3716.0 | 0.8 | 0.8 | 7.9 | 3716.1 | -2.1 |
| 238 | 0001 | 0010 | 3683.75 | 3735.7 | -0.1 | 0.9 | 19.7 | 3735.9 | 1.7 |
| 239 | 0001 | 0001 | 3694.38 | 3759.4 | -1.0 | -0.9 | 23.7 | 3749.8 | 9.6 |
| 240 | 0001 | 0000 | 3710.00 | 3774.8 | -1.1 | -0.9 | 15.4 | 3765.7 | 9.2 |
| 241 | 0000 | 1111 | 3725.63 | 3791.0 | 0.9 | 1.1 | 6.2 | 3781.5 | -0.5 |
| 242 | 0000 | 1110 | 3741.25 | 3799.9 | -2.9 | 1.3 | 18.9 | 3797.4 | 2.5 |
| 243 | 0000 | 1101 | 3758.03 | 3819.0 | -1.0 | 0.1 | 19.1 | 3813.2 | 5.8 |
| 244 | 0000 | 1100 | 3772.50 | 3830.6 | -1.1 | 0.9 | 11.5 | 3839.1 | 1.5 |
| 245 | 0000 | 1011 | 3788.13 | 3845.6 | -0.1 | -0.9 | 15.0 | 3845.0 | 0.6 |
| 246 | 0000 | 1010 | 3803.75 | 3862.2 | 0.8 | 0.9 | 16.6 | 3860.8 | 1.4 |
| 247 | 0000 | 1001 | 3819.38 | 3885.5 | 0.8 | 0.9 | 24.3 | 3876.7 | 9.8 |
| 248 | 0000 | 1000 | 3835.00 | 3902.7 | -1.0 | 0.9 | 16.2 | 3892.5 | 10.2 |
| 249 | 0000 | 0111 | 3850.63 | 3911.2 | -1.0 | -0.9 | 8.4 | 3908.4 | 2.8 |
| 250 | 0000 | 0110 | 3865.25 | 3926.0 | 0.8 | 0.0 | 14.8 | 3924.3 | 1.8 |
| 251 | 0000 | 0101 | 3881.03 | 3947.8 | 0.7 | 0.9 | 21.8 | 3940.1 | 7.7 |
| 252 | 0000 | 0100 | 3897.50 | 3969.2 | -0.2 | 1.0 | 21.4 | 3956.0 | 13.2 |
| 253 | 0000 | 0011 | 3913.13 | 3974.4 | 0.9 | -0.8 | 5.2 | 3971.8 | 2.5 |
| 254 | 0000 | 0010 | 3933.75 | 3994.2 | 1.0 | -0.8 | 19.8 | 3987.7 | 6.5 |
| 255 | 0000 | 0001 | 3944.38 | 4016.3 | 0.6 | 0.9 | 22.0 | 4003.6 | 12.7 |

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FIG 2-15 THE MAGNETIC DAMPER BOX UNIT TEST MODEL 1111 S/N 3 PAGE 263

19011/17701 10124214 11101111 TEST FULL PERFORMANCE @ AMBIENT TEMP.

11101111 11101111 11101111 11101111 11101111 11101111 11101111 11101111 11101111 11101111

| THRESHOLD AND OUTPUT
NUMBER | THRESHOLD | OUTPUT | TOTAL
VALUE
(G) | ANALOG INPUT ON PAGE (BO)
FEEDS RATIO | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--------------------------------|-----------|--------|-----------------------|--|-------|-------|------------------------------------|------------------------|-----------|
| | | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 12 | 1100 | 1100 | 777.500 | 784.9 | 0.1 | 0.9 | 10.2 | 785.1 | -0.2 |
| 13 | 1100 | 1011 | 783.125 | 800.2 | 0.8 | -0.8 | 15.3 | 800.9 | -0.8 |
| 14 | 1100 | 1010 | 803.250 | 818.4 | -0.8 | 0.2 | 18.3 | 816.8 | 1.7 |
| 15 | 1100 | 1001 | 819.375 | 838.5 | 0.8 | 0.0 | 20.0 | 832.6 | 5.9 |
| 16 | 1100 | 1000 | 835.000 | 853.0 | 1.0 | 0.8 | 14.5 | 838.5 | 4.5 |
| 17 | 1100 | 0111 | 850.625 | 861.6 | -0.8 | 0.0 | 8.6 | 864.3 | -2.7 |
| 18 | 1100 | 0110 | 865.250 | 880.6 | -0.8 | -0.8 | 19.0 | 880.2 | 0.5 |
| 19 | 1100 | 0101 | 881.375 | 901.3 | 0.2 | 0.8 | 20.6 | 896.0 | 5.2 |
| 20 | 1100 | 0100 | 897.500 | 918.5 | 0.7 | 0.8 | 17.2 | 911.9 | 6.6 |
| 21 | 1100 | 0011 | 913.125 | 925.2 | 0.8 | 0.8 | 7.3 | 927.7 | -2.0 |
| 22 | 1100 | 0010 | 928.250 | 942.8 | -0.8 | 0.0 | 22.1 | 943.5 | 4.3 |
| 23 | 1100 | 0001 | 944.375 | 961.5 | 0.8 | 0.8 | 17.2 | 959.4 | 6.2 |
| 24 | 1100 | 0000 | 960.000 | 972.2 | 0.8 | -0.0 | 6.6 | 975.2 | -3.0 |
| | | | | | | | | | |
| 25 | 1011 | 1111 | 975.625 | 988.2 | 0.8 | 0.9 | 16.0 | 991.1 | -2.9 |
| 26 | 1011 | 1110 | 991.250 | 1004.9 | 0.1 | 0.9 | 16.2 | 1006.9 | -2.0 |
| 27 | 1011 | 1101 | 1006.883 | 1029.3 | -0.8 | -0.8 | 24.4 | 1022.8 | 6.6 |
| 28 | 1011 | 1100 | 1022.500 | 1041.8 | 0.7 | 0.8 | 12.5 | 1038.6 | 3.2 |
| 29 | 1011 | 1011 | 1038.125 | 1053.2 | 0.9 | 0.1 | 11.4 | 1054.5 | -1.2 |
| 30 | 1011 | 1010 | 1053.250 | 1072.0 | 0.8 | 0.5 | 18.2 | 1070.3 | 1.6 |
| 31 | 1011 | 1001 | 1069.383 | 1093.2 | -0.8 | 0.0 | 21.2 | 1086.2 | 2.5 |
| 32 | 1011 | 1000 | 1085.000 | 1102.0 | 0.8 | 0.2 | 8.3 | 1102.0 | 0.0 |
| 33 | 1011 | 0111 | 1100.625 | 1115.4 | 0.1 | 0.8 | 13.4 | 1112.9 | 2.4 |
| 34 | 1011 | 0110 | 1116.250 | 1133.0 | 0.2 | 0.9 | 12.6 | 1133.2 | -0.2 |
| 35 | 1011 | 0101 | 1131.883 | 1155.5 | 0.2 | 0.8 | 22.5 | 1149.6 | 5.9 |
| 36 | 1011 | 0100 | 1147.500 | 1169.9 | 0.8 | 0.0 | 14.4 | 1165.4 | 4.5 |
| 37 | 1011 | 0011 | 1163.125 | 1180.4 | -0.8 | -0.8 | 10.4 | 1181.3 | -0.9 |
| 38 | 1011 | 0010 | 1178.250 | 1201.8 | -1.2 | 0.1 | 21.4 | 1192.1 | 4.2 |

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PRB 206 THE MOTEC METER BOX UNIT TEST MODEL 1.1 FLT. S/N 3 PAGE 269

1981/12/01 102242104 PRIORITY TEST FOR PERFORMANCE OF ADJUTANT TEST.

TEST NUMBER 1011 0001 1194.38 1219.2 0.9 0.8 17.4 1212.9 6.2



101101

| TEST NUMBER | ADJUTANT TEST NUMBER | TEST VOLTAGE (MV) | ANALOG TEST VOLTAGE (MV) | | | INTEGRATED FROM TEST VOLTAGE | BEST FIT STRAIGHT LINE | |
|-------------|----------------------|-------------------|--------------------------|-------|-------|------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 79 | 1011 0001 | 1194.38 | 1219.2 | 0.9 | 0.8 | 17.4 | 1212.9 | 6.2 |
| 80 | 1011 0000 | 1210.00 | 1229.4 | 0.0 | 0.8 | 10.2 | 1228.8 | 0.6 |
| 81 | 1010 1111 | 1225.63 | 1241.6 | -0.8 | -0.8 | 12.2 | 1244.6 | -3.0 |
| 82 | 1010 1110 | 1241.25 | 1258.6 | -0.9 | -0.9 | 16.9 | 1260.5 | -1.9 |
| 83 | 1010 1101 | 1256.88 | 1281.1 | 0.8 | 0.0 | 22.5 | 1276.3 | 4.8 |
| 84 | 1010 1100 | 1272.50 | 1290.6 | 0.8 | 0.9 | 9.4 | 1292.2 | -1.6 |
| 85 | 1010 1011 | 1288.13 | 1306.6 | -0.8 | 0.0 | 16.0 | 1308.0 | -1.6 |
| 86 | 1010 1010 | 1303.75 | 1326.0 | -0.5 | -0.7 | 19.4 | 1323.9 | 2.1 |
| 87 | 1010 1001 | 1319.38 | 1346.1 | 0.0 | -0.8 | 20.1 | 1339.7 | 6.4 |
| 88 | 1010 1000 | 1335.00 | 1366.8 | 0.8 | 0.9 | 10.7 | 1365.6 | 1.3 |
| 89 | 1010 0111 | 1350.63 | 1367.0 | 0.8 | 0.9 | 10.2 | 1371.4 | -4.4 |
| 90 | 1010 0110 | 1366.25 | 1386.4 | -0.8 | 0.0 | 19.4 | 1387.3 | -0.8 |
| 91 | 1010 0101 | 1381.88 | 1408.6 | -0.8 | -0.8 | 22.2 | 1403.1 | 5.5 |
| 92 | 1010 0100 | 1397.50 | 1424.9 | 0.6 | -0.7 | 16.1 | 1419.0 | 6.0 |
| 93 | 1010 0011 | 1413.13 | 1431.8 | 0.9 | 0.9 | 6.9 | 1434.8 | -3.0 |
| 94 | 1010 0010 | 1428.75 | 1451.0 | -0.0 | 0.7 | 23.2 | 1450.6 | 4.4 |
| 95 | 1010 0001 | 1444.38 | 1472.2 | 0.7 | -0.7 | 17.2 | 1466.5 | 5.7 |
| 96 | 1010 0000 | 1460.00 | 1481.0 | 0.1 | -1.5 | 12.8 | 1482.3 | 2.3 |
| 97 | 1001 1111 | 1475.63 | 1493.1 | 0.8 | 0.0 | 8.1 | 1490.2 | -5.1 |
| 98 | 1001 1110 | 1491.25 | 1509.5 | 0.8 | 0.8 | 16.5 | 1514.0 | -4.5 |
| 99 | 1001 1101 | 1506.88 | 1534.0 | -0.7 | 0.0 | 24.4 | 1529.9 | 4.1 |
| 100 | 1001 1100 | 1522.50 | 1546.7 | -0.8 | -0.7 | 12.8 | 1545.7 | 1.0 |
| 101 | 1001 1011 | 1538.13 | 1568.9 | -0.0 | 0.8 | 12.1 | 1561.6 | -2.7 |
| 102 | 1001 1010 | 1553.75 | 1576.2 | 1.0 | 0.9 | 12.3 | 1577.4 | -1.2 |
| 103 | 1001 1001 | 1569.38 | 1599.8 | 1.1 | 0.8 | 23.6 | 1593.1 | 6.5 |
| 104 | 1001 1000 | 1585.00 | 1607.9 | -0.8 | 0.0 | 8.1 | 1609.1 | -1.2 |

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HS-276 THERMALIC MASTER BOX UNIT TEST MODEL 1, LOT, SZN 3 PAGE 220

1981/1/20 10:24:54 FLIGHTY TEST FOR PERFORMANCE OF AMBIENT TEMP.

TEST DATA FOR HS-276 THERMALIC MASTER BOX UNIT TEST MODEL 1, LOT, SZN 3



010181

| THRESHOLD AND OUTPUT NUMBER | THRESHOLD | ANALOG INPUT VALUE (V) | ANALOG INPUT VOLTAGE LEVELS RATIO | | INCREASE FROM PREVIOUS THRESHOLD | BEST FIT STRAIGHT LINE | |
|-----------------------------|-----------|------------------------|-----------------------------------|-------|----------------------------------|------------------------|-------------|
| | | | NOMINAL | LOWER | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1620.1 | -0.8 | -0.8 | 12.2 | 1625.0 -4.8 |
| 106 | 1001 0110 | 1615.25 | 1637.5 | -0.9 | -0.8 | 12.7 | 1640.8 -3.3 |
| 107 | 1001 0101 | 1631.88 | 1659.8 | -0.8 | -0.8 | 22.4 | 1656.7 3.2 |
| 108 | 1001 0100 | 1647.50 | 1674.2 | -0.8 | -0.7 | 14.4 | 1672.5 1.7 |
| 109 | 1001 0011 | 1663.13 | 1685.0 | -0.8 | -0.8 | 10.8 | 1693.4 -3.4 |
| 110 | 1001 0010 | 1678.75 | 1707.1 | -0.9 | -0.8 | 22.1 | 1704.2 2.9 |
| 111 | 1001 0001 | 1694.38 | 1723.9 | -0.8 | -0.8 | 16.8 | 1720.0 3.8 |
| 112 | 1001 0000 | 1710.00 | 1739.1 | -0.8 | -0.9 | 15.3 | 1735.9 3.2 |
| 113 | 1000 1111 | 1725.63 | 1746.2 | -0.8 | -0.8 | 7.1 | 1751.7 -5.5 |
| 114 | 1000 1110 | 1741.25 | 1762.9 | -0.8 | -0.9 | 16.7 | 1767.6 -4.7 |
| 115 | 1000 1101 | 1756.88 | 1786.1 | -0.8 | -0.7 | 23.2 | 1783.4 2.7 |
| 116 | 1000 1100 | 1772.50 | 1795.1 | -0.7 | -0.8 | 8.9 | 1799.3 -4.2 |
| 117 | 1000 1011 | 1788.13 | 1810.3 | -0.9 | -0.9 | 15.2 | 1815.1 -4.9 |
| 118 | 1000 1010 | 1803.75 | 1830.4 | -0.7 | -0.7 | 20.1 | 1831.0 -0.6 |
| 119 | 1000 1001 | 1819.38 | 1852.7 | -0.8 | -0.8 | 22.3 | 1846.8 5.9 |
| 120 | 1000 1000 | 1835.00 | 1865.0 | -0.8 | -0.1 | 12.3 | 1852.7 2.3 |
| 121 | 1000 0111 | 1850.63 | 1871.4 | -0.9 | -0.9 | 6.4 | 1878.5 -7.1 |
| 122 | 1000 0110 | 1866.25 | 1889.8 | -0.8 | -0.8 | 18.4 | 1894.4 -4.6 |
| 123 | 1000 0101 | 1881.88 | 1912.8 | -0.8 | -0.7 | 23.0 | 1910.2 2.6 |
| 124 | 1000 0100 | 1897.50 | 1930.6 | -0.7 | -0.8 | 17.8 | 1926.1 4.5 |
| 125 | 1000 0011 | 1913.13 | 1935.8 | -0.7 | -0.5 | 5.3 | 1941.9 -6.1 |
| 126 | 1000 0010 | 1928.75 | 1959.1 | -0.8 | -0.8 | 23.3 | 1957.8 1.4 |
| 127 | 1000 0001 | 1944.38 | 1976.7 | -0.8 | -0.1 | 12.6 | 1973.6 3.1 |
| 128 | 1000 0000 | 1960.00 | 1984.2 | -0.7 | -0.8 | 7.5 | 1989.4 -5.3 |
| 129 | 0111 1111 | 1975.63 | 1999.1 | -0.1 | -0.8 | 14.9 | 2005.3 -6.2 |
| 130 | 0111 1110 | 1991.25 | 2017.1 | -0.8 | -4.1 | 18.0 | 2021.1 -4.0 |

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HS 266 THERMALIC MASTER FLUX UNIT TEST MODEL 1.1.1. S/N 3 PAGE 274

1981/1/20 10:24:54 FLUX UNIT TEST FULL PERFORMANCE COEFFICIENT TEMP.

FLUX UNIT TEST FULL PERFORMANCE COEFFICIENT TEMP. FLUX UNIT TEST FULL PERFORMANCE COEFFICIENT TEMP.

HAC
TEST
527

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(mV) | ANALOG INPUT VOLTAGE (mV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 210 | 0010 1110 | 3241.75 | 3286.7 | 0.7 | 0.9 | 27.2 | 3281.9 | -2.2 |
| 211 | 0010 1101 | 3255.68 | 3304.5 | -0.0 | 0.8 | 17.8 | 3304.7 | -0.3 |
| 212 | 0010 1100 | 3272.50 | 3315.9 | -0.9 | -0.9 | 11.4 | 3320.6 | -4.7 |
| 213 | 0010 1011 | 3288.13 | 3330.9 | -0.0 | -0.8 | 14.9 | 3336.4 | -1.6 |
| 214 | 0010 1010 | 3303.75 | 3352.9 | -1.4 | 0.8 | 22.0 | 3352.3 | 0.6 |
| 215 | 0010 1001 | 3319.38 | 3371.7 | 0.9 | 1.1 | 18.8 | 3368.1 | 3.6 |
| 216 | 0010 1000 | 3335.00 | 3385.9 | -0.9 | 0.1 | 14.2 | 3384.0 | 1.9 |
| 217 | 0010 0111 | 3350.63 | 3392.9 | -0.9 | -0.9 | 7.0 | 3399.8 | -6.9 |
| 218 | 0010 0110 | 3366.25 | 3412.0 | -0.1 | -0.9 | 19.1 | 3415.7 | -3.7 |
| 219 | 0010 0101 | 3381.88 | 3432.8 | 0.8 | 0.9 | 20.8 | 3431.5 | 1.3 |
| 220 | 0010 0100 | 3397.50 | 3451.6 | 0.0 | 0.9 | 18.8 | 3447.4 | 4.3 |
| 221 | 0010 0011 | 3413.13 | 3468.5 | -0.8 | -0.8 | 6.8 | 3463.2 | -4.7 |
| 222 | 0010 0010 | 3428.75 | 3484.2 | -2.0 | -1.8 | 25.8 | 3479.1 | 5.2 |
| 223 | 0010 0001 | 3444.38 | 3500.0 | 0.7 | 0.1 | 15.7 | 3494.9 | 5.1 |
| 224 | 0010 0000 | 3460.00 | 3512.5 | 0.7 | 0.7 | 12.5 | 3510.8 | 1.8 |
| 225 | 0001 1111 | 3475.63 | 3519.7 | -0.0 | 0.9 | 7.2 | 3526.6 | -6.9 |
| 226 | 0001 1110 | 3491.25 | 3541.1 | -0.6 | -0.9 | 21.3 | 3542.4 | -1.4 |
| 227 | 0001 1101 | 3506.88 | 3560.4 | -0.1 | -0.8 | 19.3 | 3558.3 | 2.1 |
| 228 | 0001 1100 | 3522.50 | 3575.9 | 0.8 | 0.7 | 15.5 | 3574.1 | 1.8 |
| 229 | 0001 1011 | 3538.13 | 3585.7 | 0.8 | 0.9 | 9.7 | 3590.0 | -4.3 |
| 230 | 0001 1010 | 3553.75 | 3606.2 | -1.0 | 0.0 | 20.5 | 3605.0 | 0.4 |
| 231 | 0001 1001 | 3569.38 | 3628.3 | -1.0 | 0.9 | 22.1 | 3621.7 | 6.6 |
| 232 | 0001 1000 | 3585.00 | 3642.7 | -1.7 | -0.8 | 14.4 | 3637.5 | 5.2 |
| 233 | 0001 0111 | 3600.63 | 3646.0 | 0.8 | 0.9 | 5.3 | 3653.4 | -1.4 |
| 234 | 0001 0110 | 3616.25 | 3672.4 | -0.1 | 0.9 | 24.4 | 3659.7 | 3.2 |
| 235 | 0001 0101 | 3631.88 | 3689.4 | -0.9 | -1.8 | 16.9 | 3685.1 | 4.3 |
| 236 | 0001 0100 | 3647.50 | 3705.4 | -0.3 | -0.8 | 16.0 | 3700.9 | 4.5 |

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HS-236 THERMAL METER MUX UNIT TEST MODEL.. F11. S/N 3 PAGE 275

1981/12/01 10:24:54 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TESTING UNIT: 12700 THERMISTOR: 12700 THERMISTOR: 12700 CHANNEL= 7 SENSORS= 5



0101

| THRESHOLD AND OUTPUT
NUMBER | THRESHOLD | DIGITAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--------------------------------|-----------|--------------------------|---------------------------|-----------------------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO
LOWER | UPPER | | POINT | DEVIATION |
| 237 | 0001 0011 | 3663.13 | 3713.9 | 0.8 | 0.0 | 8.5 | 3716.8 | -2.9 |
| 238 | 0001 0010 | 3670.75 | 3737.6 | 0.7 | 2.3 | 23.7 | 3732.6 | 5.0 |
| 239 | 0001 0001 | 3694.38 | 3756.3 | -0.1 | 0.8 | 18.7 | 3748.5 | 7.9 |
| 240 | 0001 0000 | 3710.00 | 3772.5 | -0.9 | -0.8 | 16.2 | 3764.3 | 8.2 |
| 241 | 0000 1111 | 3725.63 | 3777.2 | -0.0 | -0.9 | 4.7 | 3780.1 | -3.0 |
| 242 | 0000 1110 | 3741.25 | 3798.5 | 0.5 | 0.7 | 21.4 | 3796.0 | 2.5 |
| 243 | 0000 1101 | 3756.88 | 3816.3 | 0.7 | 0.8 | 17.8 | 3811.8 | 4.5 |
| 244 | 0000 1100 | 3772.50 | 3828.0 | -0.9 | 0.0 | 11.7 | 3827.7 | 0.3 |
| 245 | 0000 1011 | 3788.13 | 3843.3 | -0.9 | -0.8 | 15.2 | 3843.5 | -0.3 |
| 246 | 0000 1010 | 3803.75 | 3863.9 | 0.0 | -0.7 | 20.6 | 3859.4 | 4.5 |
| 247 | 0000 1001 | 3819.38 | 3884.5 | 0.8 | 0.8 | 20.6 | 3875.2 | 9.2 |
| 248 | 0000 1000 | 3835.00 | 3899.7 | 0.0 | 0.9 | 15.3 | 3891.1 | 8.7 |
| 249 | 0000 0111 | 3850.63 | 3905.8 | -0.9 | -0.8 | 6.1 | 3906.9 | -1.1 |
| 250 | 0000 0110 | 3856.25 | 3924.7 | -0.9 | -0.3 | 18.9 | 3922.8 | 2.0 |
| 251 | 0000 0101 | 3881.88 | 3945.8 | 0.7 | 0.1 | 21.0 | 3938.6 | 7.2 |
| 252 | 0000 0100 | 3897.50 | 3966.0 | 0.7 | 0.9 | 20.2 | 3954.5 | 11.5 |
| 253 | 0000 0011 | 3913.13 | 3971.1 | -0.0 | 0.9 | 5.1 | 3970.3 | 0.8 |
| 254 | 0000 0010 | 3928.75 | 3996.8 | -0.8 | -0.7 | 25.7 | 3986.2 | 10.6 |
| 255 | 0000 0001 | 3944.38 | 4014.5 | -0.1 | -0.7 | 17.7 | 4002.0 | 12.5 |

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IS-236 THERMIST MATTER MIX UNIT TEST HOWELL, E.L. SN 3 PAGE 228

981/12201 10231231 PENALTY TEST FILE FILE CHANGED DASH IDENTIFIED

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51



| BIO-SHIELD
NUMBER | AZD
THRESHOLD | OUTLET
THRESHOLD | IDEAL
VALUE
(MC) | ANALOG INLET VOLTAGE (GND) | | INCREASE
THRESHOLD | TEST FILE STRAIGHT TIME ERROR | |
|----------------------|------------------|---------------------|------------------------|----------------------------|-------|-----------------------|-------------------------------|-----------|
| | | | | NOMINAL | LOWER | | FOUND | DEVIATION |
| 26 | 1110 | 0110 | 366.250 | 370.1 | -0.9 | 0.9 | 370.4 | -0.3 |
| 27 | 1110 | 0101 | 381.875 | 390.6 | 0.0 | -0.8 | 394.2 | 4.4 |
| 28 | 1110 | 0100 | 397.500 | 408.0 | 0.9 | 0.8 | 402.1 | 5.9 |
| 29 | 1110 | 0011 | 413.125 | 415.1 | 0.8 | 0.9 | 417.9 | -2.8 |
| 30 | 1110 | 0010 | 428.750 | 438.1 | -0.8 | 0.0 | 423.8 | 4.3 |
| 31 | 1110 | 0001 | 444.375 | 451.2 | 0.8 | -0.7 | 449.6 | 5.6 |
| 32 | 1110 | 0000 | 460.000 | 462.9 | 0.8 | -0.0 | 465.1 | -2.6 |
| 33 | 1101 | 1111 | 475.625 | 476.9 | 0.8 | 0.8 | 481.3 | -4.5 |
| 34 | 1101 | 1110 | 491.250 | 494.5 | -0.0 | 0.8 | 497.2 | -2.7 |
| 35 | 1101 | 1101 | 506.875 | 518.7 | -0.8 | -0.8 | 513.8 | 5.7 |
| 36 | 1101 | 1100 | 522.500 | 530.7 | -0.7 | 0.8 | 528.9 | 1.8 |
| 37 | 1101 | 1011 | 538.125 | 542.5 | 0.9 | 0.0 | 544.8 | -2.2 |
| 38 | 1101 | 1010 | 553.750 | 560.9 | 0.7 | 0.8 | 560.6 | 0.3 |
| 39 | 1101 | 1001 | 569.375 | 582.9 | 0.7 | 0.1 | 576.5 | 6.5 |
| 40 | 1101 | 1000 | 585.000 | 593.1 | -0.9 | -0.9 | 597.3 | 0.8 |
| 41 | 1101 | 0111 | 600.625 | 605.1 | -0.0 | -0.8 | 608.2 | -3.1 |
| 42 | 1101 | 0110 | 616.250 | 623.7 | 0.8 | 0.8 | 624.0 | -0.4 |
| 43 | 1101 | 0101 | 631.875 | 644.9 | 0.7 | 0.8 | 639.7 | 5.0 |
| 44 | 1101 | 0100 | 647.500 | 661.5 | -0.9 | 0.0 | 655.2 | 5.8 |
| 45 | 1101 | 0011 | 663.125 | 670.5 | -0.9 | -0.8 | 671.6 | -1.1 |
| 46 | 1101 | 0010 | 678.750 | 690.9 | 0.8 | 0.0 | 692.4 | 3.5 |
| 47 | 1101 | 0001 | 694.375 | 709.0 | 0.7 | 0.7 | 703.3 | 5.8 |
| 48 | 1101 | 0000 | 710.000 | 723.1 | 0.0 | 0.9 | 719.1 | 4.0 |
| 49 | 1100 | 1111 | 725.625 | 732.0 | -0.8 | -0.8 | 735.0 | 2.9 |
| 50 | 1100 | 1110 | 741.250 | 749.7 | -0.8 | -0.9 | 750.8 | -1.1 |
| 51 | 1100 | 1101 | 756.875 | 772.0 | 0.7 | -0.0 | 766.7 | 5.3 |

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OF POOR QUALITY

5 236 THEMATIC MAPPER BOX UNIT TEST MODEL.. FTL S/N 3 PAGE 279

20/12/01 10:31:31 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.



| RE SHERD AND OUTPUT
NUMBER | THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|-------------------------------|-----------|------------------------|---------------------------|-------|--------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | DIFFER | | POINT | DEVIATION |
| 52 | 1100 1100 | 722.500 | 732.5 | 0.8 | 0.9 | 10.6 | 782.5 | 0.0 |
| 53 | 1100 1011 | 738.125 | 797.3 | -0.9 | -0.0 | 14.8 | 798.4 | -1.1 |
| 54 | 1100 1010 | 803.250 | 816.0 | -0.8 | -0.8 | 18.6 | 814.2 | 1.7 |
| 55 | 1100 1001 | 819.375 | 836.6 | 0.0 | -0.6 | 20.7 | 830.1 | 6.5 |
| 56 | 1100 1000 | 835.000 | 849.4 | 0.8 | 0.8 | 12.8 | 845.9 | 3.5 |
| 57 | 1100 0111 | 850.625 | 857.9 | 0.8 | 0.8 | 8.5 | 861.8 | -3.9 |
| 58 | 1100 0110 | 866.250 | 878.2 | -0.9 | 0.1 | 20.3 | 877.6 | 0.5 |
| 59 | 1100 0101 | 881.875 | 899.0 | -0.8 | -0.8 | 20.8 | 893.5 | 5.5 |
| 60 | 1100 0100 | 897.500 | 916.3 | 0.8 | -0.0 | 17.3 | 909.4 | 7.0 |
| 61 | 1100 0011 | 913.125 | 922.9 | 0.8 | 0.8 | 6.6 | 925.2 | -2.3 |
| 62 | 1100 0010 | 928.750 | 944.6 | 0.0 | 0.8 | 21.7 | 941.1 | 3.6 |
| 63 | 1100 0001 | 944.375 | 962.0 | -0.8 | -0.8 | 18.3 | 956.9 | 6.0 |
| 64 | 1100 0000 | 960.000 | 978.2 | -0.9 | -0.8 | 15.3 | 972.8 | 5.5 |
| 65 | 1011 1111 | 975.625 | 985.4 | 0.9 | 0.0 | 7.1 | 988.6 | -3.2 |
| 66 | 1011 1110 | 991.250 | 1002.5 | 0.8 | 0.9 | 17.1 | 1004.5 | -2.0 |
| 67 | 1011 1101 | 1006.88 | 1026.3 | 0.0 | 0.8 | 23.8 | 1020.3 | 6.0 |
| 68 | 1011 1100 | 1022.50 | 1039.6 | -0.8 | -0.8 | 13.3 | 1036.2 | 3.4 |
| 69 | 1011 1011 | 1038.13 | 1051.4 | 0.0 | 0.8 | 11.8 | 1052.0 | -0.7 |
| 70 | 1011 1010 | 1053.75 | 1067.9 | 0.8 | 0.8 | 16.5 | 1067.9 | 0.0 |
| 71 | 1011 1001 | 1069.38 | 1092.7 | 0.8 | 0.8 | 24.8 | 1083.7 | 9.0 |
| 72 | 1011 1000 | 1085.00 | 1098.7 | -0.8 | 0.0 | 6.0 | 1099.6 | -0.9 |
| 73 | 1011 0111 | 1100.63 | 1112.7 | -0.9 | -0.9 | 13.9 | 1115.4 | -2.8 |
| 74 | 1011 0110 | 1116.25 | 1131.5 | 0.1 | 0.8 | 18.8 | 1131.3 | 0.2 |
| 75 | 1011 0101 | 1131.88 | 1153.2 | 0.8 | 0.8 | 21.7 | 1147.1 | 6.0 |
| 76 | 1011 0100 | 1147.50 | 1167.1 | -0.0 | 0.8 | 13.9 | 1163.0 | 4.1 |
| 77 | 1011 0011 | 1163.13 | 1177.6 | -0.9 | -0.8 | 10.5 | 1178.8 | -1.2 |
| 78 | 1011 0010 | 1178.75 | 1199.8 | -0.7 | -0.9 | 22.2 | 1194.7 | 5.1 |

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THE MASTER CHAPTER SIX TEST TEST MODEL 2. THE SIZE 3 PAGE 200
 1901 12201 10311311 12201 10311311 12201 10311311 12201 10311311
 12201 10311311 12201 10311311 12201 10311311 12201 10311311



| POINT | | DEVIATION | | POINT | | DEVIATION | | POINT | | DEVIATION | | | | | | | |
|----------|-----------|-----------|----------|----------|----------|-----------|----------|----------|----------|-----------|----------|--------|------|-----|------|--------|------|
| 10000000 | 10000000 | 10000000 | 10000000 | 10000000 | 10000000 | 10000000 | 10000000 | 10000000 | 10000000 | 10000000 | 10000000 | | | | | | |
| 79 | 1011 0001 | 1194.38 | 1212.0 | 0.2 | 1.3 | 12.2 | 1210.5 | 6.5 | 100 | 1101 0000 | 1210.90 | 1212.1 | 0.3 | 0.3 | 15.1 | 1226.4 | 5.7 |
| 81 | 1010 1111 | 1225.63 | 1238.0 | 0.0 | 0.9 | 5.9 | 1242.3 | -4.2 | 102 | 1010 1110 | 1231.25 | 1256.1 | -0.9 | 0.0 | 18.1 | 1250.1 | -2.0 |
| 83 | 1010 1101 | 1255.88 | 1279.7 | 0.0 | 0.7 | 23.6 | 1279.0 | 5.8 | 104 | 1010 1100 | 1272.50 | 1288.4 | 0.8 | 0.9 | 8.7 | 1289.8 | -1.4 |
| 85 | 1010 1011 | 1288.13 | 1303.1 | 0.8 | 0.8 | 19.7 | 1305.7 | 2.6 | 106 | 1010 1010 | 1303.55 | 1323.1 | -0.3 | 0.0 | 19.9 | 1321.5 | 1.5 |
| 87 | 1010 1001 | 1319.48 | 1346.0 | 0.7 | 0.8 | 23.0 | 1332.4 | 8.7 | 108 | 1010 1000 | 1335.00 | 1374.8 | 0.0 | 0.9 | 8.7 | 1363.2 | 1.6 |
| 89 | 1010 0111 | 1350.63 | 1364.2 | 0.9 | 0.9 | 9.4 | 1369.1 | -4.8 | 110 | 1010 0110 | 1355.25 | 1383.3 | 0.1 | 0.8 | 19.0 | 1384.9 | -1.6 |
| 91 | 1010 0101 | 1381.38 | 1406.4 | -0.8 | 0.0 | 23.1 | 1400.8 | 5.6 | 112 | 1010 0100 | 1392.50 | 1424.1 | -0.9 | 0.8 | 12.7 | 1416.6 | 2.5 |
| 93 | 1010 0011 | 1413.17 | 1429.2 | 0.9 | 0.0 | 5.1 | 1432.5 | -0.3 | 114 | 1010 0010 | 1424.25 | 1452.3 | 0.8 | 1.0 | 23.1 | 1448.3 | 4.0 |
| 95 | 1010 0001 | 1444.38 | 1469.2 | 0.0 | 0.8 | 16.9 | 1464.2 | 5.1 | 116 | 1010 0000 | 1450.00 | 1482.5 | -0.9 | 0.9 | 13.3 | 1480.0 | 2.5 |
| 97 | 1001 1111 | 1495.63 | 1491.2 | 0.0 | 0.8 | 8.7 | 1495.9 | -4.7 | 118 | 1001 1110 | 1501.25 | 1507.2 | 0.8 | 0.8 | 16.0 | 1511.2 | -4.5 |
| 99 | 1001 1101 | 1506.88 | 1511.1 | 0.8 | 0.7 | 23.8 | 1522.6 | 3.5 | 120 | 1001 1100 | 1512.50 | 1539.3 | 0.8 | 0.0 | 8.2 | 1544.9 | -4.1 |
| 101 | 1001 1011 | 1508.13 | 1556.2 | 0.9 | 0.8 | 16.9 | 1559.3 | -0.1 | 102 | 1001 1010 | 1514.25 | 1571.4 | 0.0 | 0.8 | 12.1 | 1575.1 | -1.8 |
| 103 | 1001 1001 | 1512.38 | 1592.7 | 0.7 | 0.8 | 29.3 | 1591.0 | 6.7 | 104 | 1001 1000 | 1525.00 | 1604.0 | 0.0 | 0.9 | 6.4 | 1606.9 | -2.8 |

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TR-206 THERMAL POWER BOX UNIT TEST MODEL 1, FTL, SZN 3 PAGE 201
 1901/1901 1031131 THERMITY TEST FULL PERFORMANCE @ AMBIENT TEMP.



| THERMITY TEST NUMBER | THERMITY TEST SNO | IDEAL VALUE (CNS) | ANALOG THERMITY TEST RATIO | | THERMITY TEST SNO | THERMITY TEST SNO | BEST FIT STRAIGHT LINE | |
|----------------------|-------------------|-------------------|----------------------------|-------|-------------------|-------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1617.5 | 0.8 | -0.8 | 11.4 | 1622.7 | -5.2 |
| 106 | 1001 0110 | 1616.25 | 1616.0 | -0.8 | -0.9 | 18.5 | 1638.6 | 2.5 |
| 107 | 1001 0101 | 1631.88 | 1652.7 | 0.8 | 0.0 | 21.7 | 1654.4 | 3.3 |
| 108 | 1001 0100 | 1647.50 | 1672.5 | 0.8 | 0.8 | 14.7 | 1670.3 | 2.2 |
| 109 | 1001 0011 | 1663.13 | 1681.5 | -0.8 | 0.9 | 9.0 | 1686.1 | -4.6 |
| 110 | 1001 0010 | 1678.75 | 1704.4 | 0.9 | -0.9 | 22.9 | 1702.0 | 2.4 |
| 111 | 1001 0001 | 1694.38 | 1724.2 | 0.2 | -0.7 | 19.8 | 1717.8 | 6.4 |
| 112 | 1001 0000 | 1710.00 | 1737.4 | 0.9 | 0.9 | 13.2 | 1733.7 | 3.7 |
| 113 | 1000 1111 | 1725.63 | 1742.7 | 0.8 | 0.9 | 5.3 | 1749.5 | -6.8 |
| 114 | 1000 1110 | 1741.25 | 1760.6 | -0.8 | 0.0 | 17.8 | 1765.4 | -4.8 |
| 115 | 1000 1101 | 1756.88 | 1784.2 | 0.8 | 0.8 | 23.6 | 1781.2 | 3.0 |
| 116 | 1000 1100 | 1772.50 | 1793.8 | -0.8 | -0.8 | 9.6 | 1797.1 | -3.3 |
| 117 | 1000 1011 | 1788.13 | 1807.7 | 0.8 | 0.8 | 13.8 | 1812.9 | -5.3 |
| 118 | 1000 1010 | 1803.75 | 1826.9 | -0.8 | 0.8 | 19.2 | 1828.8 | -1.9 |
| 119 | 1000 1001 | 1819.38 | 1850.6 | -0.8 | -0.8 | 23.8 | 1844.6 | 6.0 |
| 120 | 1000 1000 | 1835.00 | 1863.2 | 0.7 | -0.8 | 12.6 | 1860.5 | 2.8 |
| 121 | 1000 0111 | 1850.63 | 1868.7 | 0.9 | 0.0 | 5.5 | 1876.3 | -7.6 |
| 122 | 1000 0110 | 1866.25 | 1882.5 | 0.9 | 0.9 | 18.8 | 1892.2 | -4.7 |
| 123 | 1000 0101 | 1881.88 | 1909.9 | 0.8 | 0.8 | 22.4 | 1908.0 | 1.8 |
| 124 | 1000 0100 | 1897.50 | 1927.9 | 0.8 | -0.6 | 18.0 | 1924.9 | 4.0 |
| 125 | 1000 0011 | 1913.13 | 1934.4 | 0.8 | -0.8 | 6.4 | 1939.7 | -5.4 |
| 126 | 1000 0010 | 1928.75 | 1956.7 | 0.7 | 0.6 | 22.3 | 1955.6 | 1.1 |
| 127 | 1000 0001 | 1944.38 | 1975.6 | 1.1 | 0.8 | 18.9 | 1971.5 | 4.2 |
| 128 | 1000 0000 | 1960.00 | 1982.0 | -0.9 | 0.0 | 6.4 | 1987.3 | -5.3 |
| 129 | 0111 1111 | 1975.63 | 1996.6 | -0.9 | -0.9 | 14.5 | 2003.2 | -6.6 |
| 130 | 0111 1110 | 1991.25 | 2014.7 | 1.1 | 3.4 | 18.1 | 2019.0 | -4.4 |

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HS-236 THERMATIC MATHS UNIT TEST MODEL 111 S/N 3 PAGE 283
 1981/12/01 10:31:31 THERMATIC TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST 111 - THERMATIC TEST FULL PERFORMANCE @ AMBIENT TEMP. SENSITIVITY

010191

| TEST
NUMBER | A/D
THRESHOLD | OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|----------------|------------------|---------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 158 | 0110 | 0010 | 2428.25 | 2465.6 | 0.1 | -0.7 | 25.1 | 2462.9 | 2.7 |
| 159 | 0110 | 0001 | 2444.38 | 2483.7 | 0.7 | 0.7 | 18.0 | 2478.7 | 4.9 |
| 160 | 0110 | 0000 | 2460.00 | 2491.8 | 0.9 | 0.9 | 8.2 | 2494.6 | -2.8 |
| 161 | 0101 | 1111 | 2475.63 | 2501.8 | -1.0 | -0.9 | 10.0 | 2510.4 | -8.6 |
| 162 | 0101 | 1110 | 2491.25 | 2524.1 | -0.9 | 1.2 | 22.3 | 2526.3 | -2.2 |
| 163 | 0101 | 1101 | 2506.88 | 2540.9 | 1.0 | 0.1 | 16.8 | 2542.1 | -1.2 |
| 164 | 0101 | 1100 | 2522.50 | 2557.4 | 0.8 | 0.9 | 16.5 | 2558.0 | -0.5 |
| 165 | 0101 | 1011 | 2538.13 | 2566.1 | 0.0 | 0.9 | 8.6 | 2573.8 | -7.8 |
| 166 | 0101 | 1010 | 2553.75 | 2586.9 | -1.0 | -0.9 | 20.8 | 2589.7 | -2.8 |
| 167 | 0101 | 1001 | 2569.38 | 2610.2 | -0.9 | -0.8 | 23.3 | 2605.5 | 4.7 |
| 168 | 0101 | 1000 | 2585.00 | 2617.6 | 0.9 | 0.9 | 7.4 | 2621.4 | -3.8 |
| 169 | 0101 | 0111 | 2600.63 | 2627.4 | 0.9 | 0.9 | 9.7 | 2637.2 | -9.9 |
| 170 | 0101 | 0110 | 2616.25 | 2648.0 | -0.8 | 0.0 | 20.6 | 2653.1 | -5.1 |
| 171 | 0101 | 0101 | 2631.88 | 2670.3 | -0.9 | 0.9 | 22.3 | 2669.0 | 1.4 |
| 172 | 0101 | 0100 | 2647.50 | 2685.7 | 1.1 | -0.8 | 15.4 | 2684.8 | 0.9 |
| 173 | 0101 | 0011 | 2663.13 | 2692.3 | 0.9 | 0.9 | 6.6 | 2700.7 | -8.4 |
| 174 | 0101 | 0010 | 2678.75 | 2716.4 | -2.5 | 1.0 | 24.1 | 2716.5 | -0.1 |
| 175 | 0101 | 0001 | 2694.38 | 2737.1 | -0.8 | -0.9 | 20.7 | 2732.4 | 4.8 |
| 176 | 0101 | 0000 | 2710.00 | 2748.7 | -0.9 | -0.8 | 11.5 | 2748.2 | 0.5 |
| 177 | 0100 | 1111 | 2725.63 | 2753.7 | 0.8 | -0.0 | 5.1 | 2764.1 | -10.3 |
| 178 | 0100 | 1110 | 2741.25 | 2776.7 | 0.8 | 0.8 | 22.9 | 2779.9 | -3.2 |
| 179 | 0100 | 1101 | 2756.88 | 2795.5 | -1.8 | -0.8 | 18.8 | 2795.8 | -0.3 |
| 180 | 0100 | 1100 | 2772.50 | 2806.0 | -0.8 | -0.8 | 10.5 | 2811.6 | -5.6 |
| 181 | 0100 | 1011 | 2788.13 | 2819.6 | -0.9 | -0.9 | 13.6 | 2827.5 | -7.9 |
| 182 | 0100 | 1010 | 2803.75 | 2839.9 | 0.7 | 0.8 | 20.3 | 2843.3 | -3.4 |
| 183 | 0100 | 1001 | 2819.38 | 2862.3 | 0.8 | 0.8 | 22.3 | 2859.2 | 3.1 |

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HS-236 THERMATIC METER MUX UNIT TEST MODEL 11, LOT, S/N 3 PAGE 285

1981/12/01 10:11:31 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST NO. 134 TEST DATE 12/01/81 TEST TIME 10:11:31 TEST RESULT PASS TEST NO. 134 TEST DATE 12/01/81 TEST TIME 10:11:31 TEST RESULT PASS

010181

| THRESHOLD AND OUTPUT
NUMBER | THRESHOLD | IDEAL
VOLTAGE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--------------------------------|-----------|--------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 210 | 0010 1110 | 3241.25 | 3284.2 | 0.9 | 0.7 | 16.8 | 3287.2 | -3.0 |
| 211 | 0010 1101 | 3256.88 | 3302.4 | 0.8 | 0.8 | 18.7 | 3303.0 | -0.6 |
| 212 | 0010 1100 | 3272.50 | 3321.6 | -0.9 | -0.1 | 19.2 | 3318.9 | 2.7 |
| 213 | 0010 1011 | 3288.13 | 3328.8 | -0.9 | -0.8 | 7.2 | 3334.7 | -5.9 |
| 214 | 0010 1010 | 3303.75 | 3349.5 | 0.8 | -0.8 | 20.6 | 3350.6 | -1.1 |
| 215 | 0010 1001 | 3319.38 | 3370.1 | 0.8 | 0.9 | 20.6 | 3366.5 | 3.7 |
| 216 | 0010 1000 | 3335.00 | 3383.3 | -1.9 | 0.8 | 13.2 | 3382.3 | 1.0 |
| 217 | 0010 0111 | 3350.63 | 3390.8 | -0.9 | -0.9 | 7.4 | 3398.2 | -7.4 |
| 218 | 0010 0110 | 3366.25 | 3410.3 | -0.9 | -0.9 | 19.5 | 3414.0 | -3.7 |
| 219 | 0010 0101 | 3381.88 | 3430.8 | 0.8 | 0.1 | 20.5 | 3429.9 | 0.9 |
| 220 | 0010 0100 | 3397.50 | 3451.2 | 0.7 | 0.8 | 20.4 | 3445.7 | 5.5 |
| 221 | 0010 0011 | 3413.13 | 3455.5 | -0.1 | 0.8 | 4.3 | 3461.6 | -6.0 |
| 222 | 0010 0010 | 3428.75 | 3482.6 | -2.4 | -2.2 | 27.1 | 3477.4 | 5.2 |
| 223 | 0010 0001 | 3444.38 | 3499.4 | -0.9 | -0.8 | 16.8 | 3493.3 | 6.1 |
| 224 | 0010 0000 | 3460.00 | 3511.2 | 0.8 | -0.1 | 11.7 | 3509.1 | 2.0 |
| 225 | 0001 1111 | 3475.63 | 3521.2 | -2.7 | 1.0 | 10.0 | 3525.0 | -3.8 |
| 226 | 0001 1110 | 3491.25 | 3539.0 | -0.8 | 0.1 | 17.8 | 3540.8 | -1.8 |
| 227 | 0001 1101 | 3506.88 | 3558.5 | -0.8 | 0.8 | 19.5 | 3556.7 | 1.8 |
| 228 | 0001 1100 | 3522.50 | 3575.4 | -0.0 | -0.9 | 16.8 | 3572.5 | 2.8 |
| 229 | 0001 1011 | 3538.13 | 3583.7 | 0.8 | 0.9 | 8.3 | 3588.4 | -4.7 |
| 230 | 0001 1010 | 3553.75 | 3603.4 | 0.8 | 0.9 | 19.7 | 3604.2 | -0.9 |
| 231 | 0001 1001 | 3569.38 | 3626.6 | -0.9 | -0.0 | 23.2 | 3620.1 | 6.5 |
| 232 | 0001 1000 | 3585.00 | 3638.9 | -1.0 | -1.1 | 12.3 | 3635.9 | 3.0 |
| 233 | 0001 0111 | 3600.63 | 3645.9 | 0.9 | 0.0 | 7.0 | 3651.8 | -5.9 |
| 234 | 0001 0110 | 3616.25 | 3670.3 | -4.2 | 1.0 | 24.4 | 3667.6 | 2.7 |
| 235 | 0001 0101 | 3631.88 | 3686.8 | -0.1 | 0.9 | 16.4 | 3683.5 | 3.3 |
| 236 | 0001 0100 | 3647.50 | 3705.6 | -1.0 | -0.9 | 18.8 | 3699.3 | 6.2 |

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HS-237 THERMATIC MATTER GUN UNIT TEST MODEL 22 FTL S/N 3 PAGE 286

1981/12/01 101312.31 PENALTY TEST FOR PERFORMANCE @ AMBIENT TEMP.

04.15-04.15-14 0210 THERMATIC MATTER GUN UNIT TEST FOR SENSITIVE 24

| THRESHOLD AND OUTPUT NUMBER | THRESHOLD | TOTAL VALUE (AV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE FROM PREV THRESHOLD | BEST FIT STRAIGHT LINE | |
|-----------------------------|-----------|------------------|---------------------------|-------|-------|------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 237 | 0001 0011 | 3663.13 | 3712.7 | -0.8 | -0.8 | 7.1 | 3715.7 | -2.5 |
| 238 | 0001 0010 | 3678.75 | 3735.8 | 0.7 | 9.1 | 23.1 | 3731.1 | 4.7 |
| 239 | 0001 0001 | 3694.38 | 3754.9 | 0.7 | 0.8 | 19.1 | 3748.9 | 8.0 |
| 240 | 0001 0000 | 3710.00 | 3771.4 | -1.0 | 0.1 | 16.6 | 3762.8 | 0.7 |
| 241 | 0000 1111 | 3725.63 | 3778.8 | -1.0 | -0.9 | 7.4 | 3778.6 | 0.2 |
| 242 | 0000 1110 | 3741.25 | 3796.8 | -0.1 | -0.8 | 18.0 | 3794.5 | 2.3 |
| 243 | 0000 1101 | 3756.88 | 3814.5 | 0.7 | 0.9 | 17.7 | 3810.3 | 4.2 |
| 244 | 0000 1100 | 3772.50 | 3825.9 | 0.8 | 0.8 | 11.4 | 3826.2 | -0.7 |
| 245 | 0000 1011 | 3788.13 | 3841.3 | -0.9 | 0.1 | 15.4 | 3842.0 | -0.7 |
| 246 | 0000 1010 | 3803.75 | 3862.2 | -1.0 | 0.8 | 20.9 | 3857.9 | 4.3 |
| 247 | 0000 1001 | 3819.38 | 3882.7 | 0.8 | 0.1 | 20.5 | 3873.7 | 9.0 |
| 248 | 0000 1000 | 3835.00 | 3897.9 | 0.9 | 0.9 | 15.2 | 3889.6 | 8.4 |
| 249 | 0000 0111 | 3850.63 | 3902.9 | 0.0 | 0.9 | 5.0 | 3905.4 | -2.5 |
| 250 | 0000 0110 | 3866.25 | 3923.4 | -1.0 | 0.9 | 20.4 | 3921.3 | 2.1 |
| 251 | 0000 0101 | 3881.88 | 3944.9 | -1.0 | 0.8 | 21.5 | 3937.1 | 7.8 |
| 252 | 0000 0100 | 3897.50 | 3965.4 | 0.6 | 0.1 | 20.5 | 3953.0 | 12.4 |
| 253 | 0000 0011 | 3913.13 | 3969.2 | 0.8 | 0.9 | 3.9 | 3968.8 | 0.4 |
| 254 | 0000 0010 | 3928.75 | 3995.0 | -0.9 | 0.1 | 25.8 | 3984.7 | 10.3 |
| 255 | 0000 0001 | 3944.38 | 4013.2 | -0.9 | -0.8 | 18.2 | 4000.5 | 12.7 |



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OF POOR QUALITY

HS-235 DYNAMIC HOPPER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 287

1981/12/01 10:13:154 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

DEVIATION OF SLOPE FROM IDEAL IS: 1.495%
 OFFSET IS: -38.4MV
 COEFFICIENT OF DETERMINATION IS: R**2 = .99998600
 ANALOG INPUT DURING DC RESTORE IS: 63.8MV



010181

CHECK 1) RMS ERROR 2) THRESHOLD INCREMENT(+/- 0.0 = THRESH INC = 31.2)
 THE REMAINING DATA ARE FOR INFORMATION ONLY

DEVIATION OF SLOPE FROM IDEAL IS: 1.495%
 OFFSET IS: -38.4MV

COEFFICIENT OF DETERMINATION IS: R**2 = .99998600
 ANALOG INPUT DURING DC RESTORE IS: 63.8MV

RMS ERROR = 4.635MV REPEAT: RMS ERROR <= 7.812MV

THRESHOLD INCREMENT

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 25.0MV | 190 | 15.942MV | 2.8MV | 126 | 5.565MV |
| 1.4MV | 211 | -0.238MV | -9.1MV | 159 | 1.259MV |
| 6.8MV | 203 | 0.064MV | -1.3MV | 107 | 1.952MV |

TEST PASSED

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HS-236 THERMATIC MAPPER MUX UNIT TEST MODEL.. 111. S/N 3 PAGE 209

1981/12/01 10:38:00 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51

MAC
T-11
527

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| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO= 1:11
NOMINAL LOWER UPPER | INCREASE
FROM PREV
THRESHOLD | FIRST FIT STRAIGHT LINE
POINT DEVIATION |
|--|------------------------|--|------------------------------------|--|
| 26 1110 0110 | 366.250 | 373.2 -0.0 0.9 | 20.0 | 373.9 -0.7 |
| 27 1110 0101 | 381.875 | 394.4 -1.0 -0.9 | 21.2 | 389.7 4.6 |
| 28 1110 0100 | 397.500 | 413.1 -0.8 -0.8 | 18.7 | 405.6 7.5 |
| 29 1110 0011 | 413.125 | 418.8 0.9 1.0 | 5.7 | 421.5 -2.7 |
| 30 1110 0010 | 428.750 | 441.7 0.8 0.9 | 22.0 | 437.3 4.3 |
| 31 1110 0001 | 444.375 | 455.8 -0.9 -0.0 | 14.1 | 453.2 2.6 |
| 32 1110 0000 | 460.000 | 467.6 -0.8 -0.8 | 11.8 | 469.0 -1.4 |
| 33 1101 1111 | 475.625 | 481.5 -0.0 -0.9 | 13.9 | 484.9 -3.4 |
| 34 1101 1110 | 491.250 | 498.5 0.8 0.9 | 17.0 | 500.8 -2.2 |
| 35 1101 1101 | 506.875 | 521.6 0.8 0.9 | 23.1 | 516.6 5.0 |
| 36 1101 1100 | 522.500 | 535.0 -0.9 0.9 | 13.4 | 532.5 2.5 |
| 37 1101 1011 | 538.125 | 547.1 -0.9 -0.9 | 12.1 | 548.3 -1.2 |
| 38 1101 1010 | 553.750 | 565.7 0.9 0.2 | 18.4 | 564.2 1.5 |
| 39 1101 1001 | 569.375 | 582.2 0.9 0.9 | 16.5 | 580.0 2.1 |
| 40 1101 1000 | 585.000 | 594.7 0.0 0.9 | 12.5 | 595.9 -1.2 |
| 41 1101 0111 | 600.625 | 608.9 -1.0 0.9 | 14.2 | 611.8 -2.8 |
| 42 1101 0110 | 616.250 | 628.5 -1.0 -0.9 | 19.6 | 627.6 0.9 |
| 43 1101 0101 | 631.875 | 648.5 0.9 0.9 | 19.9 | 643.5 5.0 |
| 44 1101 0100 | 647.500 | 664.1 0.8 0.9 | 15.6 | 659.3 4.8 |
| 45 1101 0011 | 663.125 | 674.3 -0.9 0.1 | 10.1 | 675.2 -0.9 |
| 46 1101 0010 | 678.750 | 696.2 -1.0 -0.9 | 21.9 | 691.1 5.1 |
| 47 1101 0001 | 694.375 | 710.2 0.0 -0.9 | 14.0 | 706.9 3.3 |
| 48 1101 0000 | 710.000 | 726.4 0.9 0.9 | 16.2 | 722.8 3.6 |
| 49 1100 1111 | 725.625 | 735.0 0.9 0.9 | 8.6 | 738.6 -3.7 |
| 50 1100 1110 | 741.250 | 753.9 -0.2 -0.9 | 18.9 | 754.5 -0.6 |
| 51 1100 1101 | 756.875 | 776.8 -1.0 -1.0 | 22.8 | 770.4 6.4 |

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06.01.81

1018

18

| TEST SHEET NUMBER | AND OUTPUT TEST SHEET | DATA VALUE (AV) | ANALOG INPUT VALUE NOMINAL | OUTPUT RATIO LOWER | (NO) 1:1 UPPER | INCOMPARISON TEST SHEET | BEST FIT STRAIGHT LINE POINT | DEVIATION |
|-------------------|-----------------------|-----------------|----------------------------|--------------------|----------------|-------------------------|------------------------------|-----------|
| 105 | 1001 0111 | 1600.63 | 1620.8 | 0.9 | 1.0 | 13.8 | 1626.7 | -5.9 |
| 106 | 1001 0110 | 1616.25 | 1640.5 | -0.9 | 1.0 | 19.7 | 1642.6 | -2.1 |
| 107 | 1001 0101 | 1631.88 | 1662.9 | 1.2 | -1.3 | 22.4 | 1658.4 | 4.5 |
| 108 | 1001 0100 | 1647.50 | 1676.1 | 0.9 | 0.0 | 13.2 | 1674.3 | 1.8 |
| 109 | 1001 0011 | 1663.13 | 1689.7 | 0.9 | 1.0 | 9.6 | 1690.1 | -3.5 |
| 110 | 1001 0010 | 1678.75 | 1707.8 | 0.1 | 0.9 | 22.1 | 1706.0 | 1.8 |
| 111 | 1001 0001 | 1694.38 | 1726.1 | -0.7 | -0.7 | 18.3 | 1721.9 | 4.3 |
| 112 | 1001 0000 | 1710.00 | 1742.0 | -0.8 | -0.9 | 15.9 | 1737.7 | 4.3 |
| 113 | 1000 1111 | 1725.63 | 1747.1 | 0.9 | 0.9 | 5.1 | 1753.6 | -6.5 |
| 114 | 1000 1110 | 1741.25 | 1764.3 | 0.9 | 0.8 | 17.1 | 1769.4 | -5.1 |
| 115 | 1000 1101 | 1756.88 | 1788.6 | -0.9 | 0.1 | 24.2 | 1785.3 | 3.3 |
| 116 | 1000 1100 | 1772.50 | 1798.9 | 0.9 | -0.8 | 10.3 | 1801.2 | -2.3 |
| 117 | 1000 1011 | 1788.13 | 1812.9 | 0.0 | 0.9 | 13.0 | 1817.0 | -4.1 |
| 118 | 1000 1010 | 1803.75 | 1831.2 | 0.9 | 0.9 | 18.1 | 1832.9 | 1.7 |
| 119 | 1000 1001 | 1819.38 | 1854.2 | 1.6 | 0.9 | 23.0 | 1848.7 | 5.4 |
| 120 | 1000 1000 | 1835.00 | 1865.5 | -0.9 | 0.9 | 11.3 | 1864.6 | 0.9 |
| 121 | 1000 0111 | 1850.63 | 1874.2 | -1.0 | 1.0 | 8.7 | 1880.5 | -6.3 |
| 122 | 1000 0110 | 1866.25 | 1892.1 | 1.0 | 0.0 | 17.9 | 1896.3 | -4.2 |
| 123 | 1000 0101 | 1881.88 | 1914.3 | 0.9 | 0.9 | 22.1 | 1912.2 | 2.1 |
| 124 | 1000 0100 | 1897.50 | 1932.3 | 0.0 | 0.8 | 18.1 | 1923.0 | 4.3 |
| 125 | 1000 0011 | 1913.13 | 1939.0 | 1.0 | 0.9 | 6.6 | 1943.9 | -4.9 |
| 126 | 1000 0010 | 1928.75 | 1952.1 | 0.9 | 0.9 | 23.1 | 1959.2 | 2.4 |
| 127 | 1000 0001 | 1944.38 | 1977.8 | 1.0 | 0.9 | 17.7 | 1975.6 | 2.2 |
| 128 | 1000 0000 | 1960.00 | 1984.3 | 1.2 | 1.2 | 6.5 | 1991.5 | 7.2 |
| 129 | 0111 1111 | 1975.63 | 2001.2 | 0.7 | -0.1 | 16.9 | 2007.3 | -6.1 |
| 130 | 0111 1110 | 1991.25 | 2019.4 | -0.9 | -0.9 | 18.2 | 2023.2 | -3.8 |

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10.10.72



293

1-000

MODEL 111, S/N 3

15. 2. 72 THE BUILT-IN UNIT TEST

1981/12/01 10:38:08 1981/12/01 10:38:08

15. 2. 72 THE BUILT-IN UNIT TEST

INCREASE

INCREASE

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| | | | | | | | | | |
|------|--------|------|------|------|--------|---------|------|------|-----|
| 2.9 | 2039.0 | 22.0 | -0.9 | -0.1 | 2041.9 | 2006.88 | 0111 | 1101 | 141 |
| 0.3 | 2034.9 | 13.7 | 0.9 | 0.9 | 2050.2 | 2022.50 | 0111 | 1100 | 132 |
| -0.6 | 2070.8 | 10.0 | 1.1 | 1.0 | 2060.2 | 2038.13 | 0111 | 1011 | 133 |
| -0.1 | 2086.6 | 21.3 | -0.9 | -0.9 | 2086.5 | 2053.75 | 0111 | 1010 | 134 |
| 7.0 | 2102.5 | 23.0 | -1.0 | -0.9 | 2109.5 | 2069.38 | 0111 | 1001 | 135 |
| -6.0 | 2118.3 | 7.8 | 0.0 | 1.0 | 2122.3 | 2085.00 | 0111 | 1000 | 136 |
| 7.5 | 2134.2 | 14.3 | 0.9 | 0.9 | 2126.6 | 2100.63 | 0111 | 0111 | 137 |
| -3.4 | 2150.0 | 20.0 | 0.9 | 0.0 | 2146.3 | 2116.25 | 0111 | 0110 | 138 |
| 4.0 | 2165.9 | 23.3 | -0.9 | -1.0 | 2169.9 | 2131.88 | 0111 | 0101 | 139 |
| 3.0 | 2181.8 | 14.9 | -0.9 | -0.9 | 2184.8 | 2147.50 | 0111 | 0100 | 140 |
| -6.0 | 2197.6 | 6.8 | 0.9 | 0.9 | 2191.6 | 2163.13 | 0111 | 0011 | 141 |
| 2.2 | 2213.5 | 24.0 | 0.9 | 0.2 | 2215.6 | 2178.75 | 0111 | 0010 | 142 |
| 7.1 | 2229.3 | 20.8 | 0.1 | -0.8 | 2236.4 | 2194.38 | 0111 | 0001 | 143 |
| 0.7 | 2245.2 | 9.5 | -0.9 | -0.9 | 2245.9 | 2210.00 | 0111 | 0000 | 144 |
| -7.2 | 2261.1 | 7.9 | -0.9 | 0.0 | 2253.9 | 2225.63 | 0110 | 1111 | 145 |
| -5.4 | 2276.9 | 17.6 | 0.8 | 0.8 | 2271.5 | 2241.25 | 0110 | 1110 | 146 |
| 0.9 | 2292.8 | 22.2 | 1.1 | 0.6 | 2293.2 | 2256.88 | 0110 | 1101 | 147 |
| -5.5 | 2308.6 | 18.6 | -0.9 | -0.9 | 2312.2 | 2272.50 | 0110 | 1100 | 148 |
| -1.3 | 2324.5 | 6.7 | 0.9 | -0.9 | 2318.9 | 2288.13 | 0110 | 1011 | 149 |
| -1.0 | 2340.4 | 20.1 | 0.1 | 1.0 | 2319.1 | 2303.75 | 0110 | 1010 | 150 |
| 0.2 | 2356.2 | 22.3 | 0.9 | 0.9 | 2361.4 | 2319.38 | 0110 | 1001 | 151 |
| -5.2 | 2372.1 | 5.5 | 0.9 | 0.1 | 2366.9 | 2335.00 | 0110 | 1000 | 152 |
| -7.6 | 2387.9 | 13.4 | -0.9 | -1.0 | 2380.3 | 2350.63 | 0110 | 0111 | 153 |
| -3.4 | 2403.8 | 20.0 | -0.9 | -1.0 | 2400.4 | 2366.25 | 0110 | 0110 | 154 |
| 2.1 | 2419.6 | 21.3 | 0.9 | 0.9 | 2421.2 | 2381.88 | 0110 | 0101 | 155 |
| 3.6 | 2435.5 | 17.4 | 1.0 | 0.9 | 2439.1 | 2397.50 | 0110 | 0100 | 156 |
| -6.1 | 2451.4 | 6.1 | 0.0 | -0.9 | 2445.2 | 2413.13 | 0110 | 0011 | 157 |

FIG. 1-16 THE NOISE BARRIER BOX UNIT TEST MODEL... 117, 12/2/81 PAGE 293

12/2/12/201 THE NOISE BARRIER BOX UNIT TEST MODEL PERFORMANCE @ AMBIENT TEMPERATURE

THE NOISE BARRIER BOX UNIT TEST MODEL PERFORMANCE @ AMBIENT TEMPERATURE

| THRESHOLD AND DEVIATION | THRESHOLD | DEVIATION | TOTAL NOISE (dB) | ANALOG INPUT OUTPUT (dB) | FEEDBACK RATIO= 1:1 | INCREASE FROM PREV THRESHOLD | BEST FIT STRAIGHT LINE | | |
|-------------------------|-----------|-----------|------------------|--------------------------|---------------------|------------------------------|------------------------|-----------|------|
| | | | | | | | POINT | DEVIATION | |
| 153 | 0110 | 0010 | 2428.25 | 2428.25 | 0.9 | -0.9 | 25.1 | 2462.2 | 3.1 |
| 159 | 0110 | 0001 | 2434.38 | 2439.1 | -9.1 | -1.0 | 18.8 | 2483.1 | 6.0 |
| 150 | 0110 | 0000 | 2460.00 | 2491.9 | 0.9 | 0.9 | 6.8 | 2498.9 | -3.0 |
| 161 | 0101 | 1111 | 2471.63 | 2505.6 | 0.9 | 1.0 | 9.7 | 2514.8 | -9.1 |
| 162 | 0101 | 1110 | 2491.25 | 2527.6 | -0.9 | 0.9 | 22.0 | 2530.7 | -3.0 |
| 163 | 0101 | 1101 | 2506.88 | 2546.5 | -0.9 | 1.0 | 13.9 | 2546.5 | 0.0 |
| 164 | 0101 | 1100 | 2522.50 | 2561.5 | 0.8 | 0.6 | 14.9 | 2562.4 | -0.9 |
| 165 | 0101 | 1011 | 2538.13 | 2570.7 | 6.9 | 0.9 | 9.3 | 2578.2 | 7.5 |
| 166 | 0101 | 1010 | 2554.75 | 2590.5 | 6.1 | 0.9 | 19.9 | 2594.1 | -3.5 |
| 167 | 0101 | 1001 | 2569.38 | 2613.7 | -1.1 | -1.0 | 21.1 | 2609.9 | 3.8 |
| 168 | 0101 | 1000 | 2585.00 | 2619.6 | -1.0 | 0.9 | 5.9 | 2615.8 | -6.2 |
| 169 | 0101 | 0111 | 2606.63 | 2632.2 | 0.9 | 0.9 | 12.6 | 2641.7 | -9.5 |
| 170 | 0101 | 0110 | 2616.25 | 2651.9 | 1.0 | 0.9 | 19.7 | 2657.5 | -5.6 |
| 171 | 0101 | 0101 | 2631.88 | 2674.8 | -0.9 | -0.8 | 21.9 | 2673.4 | 0.4 |
| 172 | 0101 | 0100 | 2647.50 | 2690.4 | 0.9 | 0.9 | 16.6 | 2689.2 | 1.2 |
| 173 | 0101 | 0011 | 2663.13 | 2698.0 | 0.8 | -0.9 | 7.6 | 2705.1 | -7.1 |
| 174 | 0101 | 0010 | 2673.75 | 2721.0 | -2.1 | 0.9 | 21.0 | 2721.0 | 0.1 |
| 175 | 0101 | 0001 | 2694.38 | 2740.9 | -0.2 | 0.9 | 19.9 | 2736.8 | 4.1 |
| 176 | 0101 | 0000 | 2710.00 | 2752.8 | 0.9 | 0.8 | 11.8 | 2752.7 | 0.1 |
| 177 | 0100 | 1111 | 2721.63 | 2759.5 | 0.9 | 0.9 | 6.7 | 2768.5 | -9.0 |
| 178 | 0100 | 1110 | 2741.25 | 2778.5 | -0.8 | 1.0 | 19.0 | 2784.4 | -5.9 |
| 179 | 0100 | 1101 | 2756.88 | 2798.5 | 1.0 | 1.1 | 20.8 | 2800.3 | -1.8 |
| 180 | 0100 | 1100 | 2772.50 | 2816.8 | -0.1 | 0.9 | 18.4 | 2816.1 | 0.7 |
| 181 | 0100 | 1011 | 2788.13 | 2832.5 | 1.3 | 1.2 | 7.8 | 2832.0 | -7.4 |
| 182 | 0100 | 1010 | 2803.75 | 2847.6 | -0.1 | 0.9 | 21.0 | 2847.8 | -2.3 |
| 183 | 0100 | 1001 | 2819.38 | 2863.7 | 1.0 | 0.8 | 20.2 | 2863.7 | 2.1 |



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ORIGINAL PAGE 19
OF POOR QUALITY

C-4

11. 2. THE MOBILE CENTER LINE TEST (MODEL 1.1, 5/20/73) PAGE 276

1967-1968 TO 1968-1969 (1967-1968) TEST FOR THE DEGREE OF CLOSURE TEMP.

1967-1968 TO 1968-1969 (1967-1968) TEST FOR THE DEGREE OF CLOSURE TEMP. SENSITIVE

| TESTED AND CORRECTED | | | ANALOG INPUT VOLTAGE (V) | | TEMPERATURE | | BEST FIT STRAIGHT LINE | |
|----------------------|-----------|---------|--------------------------|------|-------------|-----------|------------------------|-----------|
| NUMBER | THRESHOLD | UNIT | NOMINAL | UNIT | TEMP | THRESHOLD | POINT | DEVIATION |
| 210 | 0010 1110 | 3241.25 | 3287.6 | -0.1 | 0.9 | 19.2 | 3291.9 | -4.1 |
| 211 | 0010 1101 | 3256.88 | 3307.0 | -1.4 | 1.5 | 19.4 | 3307.7 | -0.8 |
| 212 | 0010 1100 | 3272.0 | 3326.4 | -6.4 | 1.0 | 19.4 | 3323.6 | 2.8 |
| 213 | 0010 1011 | 3287.13 | 3344.0 | -0.9 | 0.0 | 7.6 | 3339.4 | -1.5 |
| 214 | 0010 1010 | 3303.25 | 3364.5 | -1.0 | -0.9 | 20.5 | 3365.3 | -0.8 |
| 215 | 0010 1001 | 3319.38 | 3376.0 | -0.1 | -0.8 | 21.5 | 3371.7 | 4.8 |
| 216 | 0010 1000 | 3335.00 | 3384.4 | 0.4 | 0.9 | 8.4 | 3387.0 | -2.6 |
| 217 | 0010 0111 | 3350.43 | 3395.1 | 0.0 | 1.0 | 10.7 | 3402.9 | -7.8 |
| 218 | 0010 0110 | 3366.25 | 3415.6 | -1.0 | -1.0 | 20.5 | 3418.7 | -3.2 |
| 219 | 0010 0101 | 3381.50 | 3436.5 | -0.6 | -0.6 | 21.0 | 3434.6 | 7.0 |
| 220 | 0010 0100 | 3397.50 | 3457.4 | 0.8 | -0.1 | 13.8 | 3450.5 | 4.9 |
| 221 | 0010 0011 | 3413.13 | 3460.4 | 1.3 | 1.1 | 5.1 | 3466.3 | -5.9 |
| 222 | 0010 0010 | 3428.25 | 3487.5 | -0.7 | 0.9 | 25.1 | 3487.2 | 3.4 |
| 223 | 0010 0001 | 3444.38 | 3504.6 | -1.0 | -0.9 | 19.0 | 3498.0 | 6.5 |
| 224 | 0010 0000 | 3460.00 | 3516.7 | 0.0 | -0.9 | 12.1 | 3513.9 | 2.8 |
| 225 | 0001 1111 | 3475.63 | 3526.6 | -7.8 | 1.0 | 9.9 | 3529.7 | -3.2 |
| 226 | 0001 1110 | 3491.25 | 3547.9 | -0.8 | 1.0 | 16.1 | 3545.6 | -2.7 |
| 227 | 0001 1101 | 3506.88 | 3567.8 | -1.0 | 0.1 | 20.8 | 3561.5 | 2.3 |
| 228 | 0001 1100 | 3522.50 | 3580.5 | -0.9 | -0.9 | 15.7 | 3577.3 | 3.1 |
| 229 | 0001 1011 | 3538.13 | 3599.7 | -0.7 | -0.8 | 9.3 | 3593.2 | -1.4 |
| 230 | 0001 1010 | 3554.25 | 3608.4 | 0.3 | 0.9 | 18.7 | 3609.0 | -0.6 |
| 231 | 0001 1001 | 3570.38 | 3631.0 | -1.1 | 1.9 | 22.5 | 3624.9 | 6.1 |
| 232 | 0001 1000 | 3586.00 | 3651.9 | -0.9 | 1.0 | 6.9 | 3640.8 | -2.9 |
| 233 | 0001 0111 | 3601.53 | 3672.7 | -1.0 | -1.0 | 14.3 | 3656.6 | -4.4 |
| 234 | 0001 0110 | 3617.13 | 3690.4 | 1.1 | -0.1 | 18.1 | 3672.5 | -2.1 |
| 235 | 0001 0101 | 3632.50 | 3692.0 | 0.8 | 1.1 | 11.6 | 3688.3 | 3.7 |
| 236 | 0001 0100 | 3647.50 | 3708.9 | -0.0 | 1.0 | 16.9 | 3704.2 | 4.7 |

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105-216 THEOMATIC SUPER BOX UNIT TEST MODEL 1, P11, S/N 1 PAGE 400

1981/12/01 10:49:44 FINALITY TEST FULL FREEDOM OF CORRECTION TEST.

TEST RESULTS: 21-44 ANALOG THRESHOLD TEST CHANNELS 22 SENSORS

H/C
TEST
527

0.0131

| INCREASED AND OUTLINE
NUMBER | AND OUTLINE
THRESHOLD | DEFIN
VALUE
(V) | ANALOG INPUT VOLTAGE (V) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------------------|--------------------------|-----------------------|--------------------------|-----------------|--------------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS
LOWER | 1:1
UPPER | | POINT | DEVIATION |
| 25 | 1110 0110 | 366.250 | 359.2 | 0.6 | 0.7 | 19.3 | 370.0 | -0.8 |
| 27 | 1110 0101 | 381.250 | 377.6 | -0.8 | 0.0 | 20.4 | 385.9 | 3.7 |
| 29 | 1110 0100 | 397.500 | 409.6 | -0.8 | -0.7 | 20.0 | 401.7 | 7.9 |
| 29 | 1110 0011 | 413.125 | 415.6 | 0.7 | -0.0 | 6.0 | 417.6 | -1.9 |
| 30 | 1110 0010 | 428.250 | 436.9 | 0.7 | 0.7 | 21.2 | 433.4 | 3.4 |
| 31 | 1110 0001 | 444.375 | 454.5 | -0.1 | 0.7 | 17.7 | 449.3 | 5.2 |
| 32 | 1110 0000 | 460.000 | 464.0 | -0.8 | -0.8 | 9.5 | 465.1 | -1.1 |
| 33 | 1101 1111 | 475.625 | 478.1 | -0.8 | -0.7 | 14.1 | 481.0 | -2.9 |
| 34 | 1101 1110 | 491.250 | 494.4 | 0.5 | -0.1 | 16.4 | 496.8 | -2.4 |
| 35 | 1101 1101 | 506.875 | 516.4 | 0.7 | 0.7 | 21.9 | 512.7 | 3.7 |
| 35 | 1101 1100 | 522.500 | 526.9 | -0.7 | 0.0 | 10.5 | 528.5 | -1.7 |
| 37 | 1101 1011 | 538.125 | 543.8 | -0.7 | -0.7 | 16.9 | 544.4 | -0.6 |
| 38 | 1101 1010 | 553.750 | 561.7 | -0.0 | -0.7 | 17.9 | 560.3 | 1.5 |
| 39 | 1101 1001 | 569.375 | 582.0 | 0.7 | 0.7 | 20.3 | 576.1 | 5.9 |
| 40 | 1101 1000 | 585.000 | 592.9 | 0.6 | 0.7 | 10.9 | 592.0 | 0.9 |
| 41 | 1101 0111 | 600.625 | 605.5 | -0.8 | -0.0 | 12.6 | 607.8 | -2.3 |
| 42 | 1101 0110 | 616.250 | 624.3 | -0.8 | -0.8 | 18.7 | 623.7 | 0.6 |
| 43 | 1101 0101 | 631.875 | 643.4 | 0.8 | 0.0 | 19.1 | 639.5 | 3.9 |
| 44 | 1101 0100 | 647.500 | 660.6 | 0.6 | 0.7 | 17.7 | 655.4 | 5.2 |
| 45 | 1101 0011 | 663.125 | 670.7 | 0.0 | 0.9 | 9.6 | 671.7 | -1.1 |
| 46 | 1101 0010 | 678.750 | 691.3 | -0.8 | -0.7 | 21.1 | 687.1 | 4.7 |
| 47 | 1101 0001 | 694.375 | 707.7 | -0.7 | -0.7 | 18.4 | 707.9 | 6.8 |
| 48 | 1101 0000 | 710.000 | 723.1 | 0.7 | 0.0 | 14.4 | 718.8 | 4.3 |
| 49 | 1100 1111 | 725.625 | 731.7 | 0.8 | 0.8 | 8.6 | 734.7 | -2.9 |
| 50 | 1100 1110 | 741.250 | 749.5 | -0.7 | -0.0 | 17.8 | 750.5 | -1.0 |
| 51 | 1100 1101 | 756.875 | 771.1 | -0.6 | -0.8 | 21.5 | 766.4 | 4.7 |

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| THRESHOLD
NUMBER | AND
THRESHOLD | OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE
LEVELS RATIO | | DIFFERENCE
FROM 1000
THRESHOLD | BEST FIT STRAIGHT LINE | | |
|---------------------|------------------|---------------------|------------------------|--------------------------------------|-----------------|--------------------------------------|------------------------|--------|------|
| | | | NOMINAL | LOWER | 1 : 1
DIFFER | POINT | DEVIATION | | |
| 210 | 0010 | 1110 | 3291.25 | 3280.9 | -0.7 | 0.8 | 9.4 | 3287.2 | -6.3 |
| 211 | 0010 | 1101 | 3296.88 | 3304.7 | 0.7 | 0.8 | 24.8 | 3303.0 | 1.6 |
| 212 | 0010 | 1100 | 3222.50 | 3313.0 | 0.7 | 0.8 | 8.3 | 3318.9 | -5.9 |
| 213 | 0010 | 1011 | 3288.13 | 3328.7 | 0.8 | 0.8 | 15.6 | 3334.8 | -6.1 |
| 214 | 0010 | 1010 | 3301.25 | 3346.6 | -0.9 | 2.7 | 17.9 | 3350.6 | -4.0 |
| 215 | 0010 | 1001 | 3319.78 | 3372.8 | -0.9 | -0.9 | 26.2 | 3366.5 | 6.3 |
| 216 | 0010 | 1000 | 3335.00 | 3384.0 | 0.6 | 0.6 | 11.2 | 3382.1 | 1.7 |
| 217 | 0010 | 0111 | 3350.63 | 3390.7 | 0.8 | 0.8 | 6.7 | 3398.2 | -7.5 |
| 218 | 0010 | 0110 | 3366.25 | 3409.9 | -0.7 | -0.8 | 19.2 | 3414.0 | -4.1 |
| 219 | 0010 | 0101 | 3381.88 | 3433.6 | -0.8 | -3.7 | 23.7 | 3429.9 | 3.7 |
| 220 | 0010 | 0100 | 3397.50 | 3449.6 | 0.8 | 0.7 | 16.0 | 3445.7 | 3.9 |
| 221 | 0010 | 0011 | 3413.13 | 3456.3 | 0.8 | 0.8 | 6.6 | 3461.6 | -5.3 |
| 222 | 0010 | 0010 | 3428.25 | 3481.3 | 0.6 | 0.7 | 25.0 | 3477.4 | 3.8 |
| 223 | 0010 | 0001 | 3444.38 | 3499.2 | 0.6 | 0.8 | 17.9 | 3493.3 | 5.9 |
| 224 | 0110 | 0000 | 3460.00 | 3512.3 | -0.8 | -0.8 | 13.1 | 3509.1 | 3.2 |
| | | | | | | | | | |
| 225 | 0001 | 1111 | 3475.63 | 3525.8 | -6.6 | 0.8 | 19.5 | 3525.0 | 0.8 |
| 226 | 0001 | 1110 | 3491.25 | 3535.2 | 0.6 | 0.5 | 9.4 | 3540.9 | -5.6 |
| 227 | 0001 | 1101 | 3506.88 | 3560.2 | -0.2 | 0.8 | 24.9 | 3556.7 | 3.5 |
| 228 | 0001 | 1100 | 3522.50 | 3567.5 | -0.8 | 0.7 | 7.3 | 3572.6 | -5.1 |
| 229 | 0001 | 1011 | 3538.13 | 3585.2 | -5.8 | -0.7 | 17.7 | 3588.4 | -1.2 |
| 230 | 0001 | 1010 | 3551.25 | 3604.2 | -7.3 | 0.7 | 15.0 | 3604.3 | -0.1 |
| 231 | 0001 | 1001 | 3569.78 | 3627.8 | 0.6 | 0.7 | 23.6 | 3620.1 | 7.7 |
| 232 | 0001 | 1000 | 3585.00 | 3641.0 | -0.8 | 0.1 | 13.2 | 3636.0 | 5.0 |
| 233 | 0001 | 0111 | 3500.63 | 3647.6 | -0.8 | -0.8 | 6.6 | 3651.8 | -4.3 |
| 234 | 0001 | 0110 | 3516.25 | 3665.7 | -0.1 | -0.8 | 18.2 | 3667.7 | -2.0 |
| 235 | 0001 | 0101 | 3531.88 | 3689.0 | 0.6 | 0.8 | 21.3 | 3683.5 | 5.5 |
| 236 | 0001 | 0100 | 3547.50 | 3703.6 | -1.1 | -1.2 | 14.6 | 3699.4 | 4.2 |

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HS-706 THERMATIC MAPPER BOX UNIT TEST MODEL 1, FL 1, S/N 3 PAGE 311
 1901/12/01 10:51:21 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 3-3-3-1-1-1 AND THRESHOLD TEST CRAND= 2, SENSOR=9



0001

| THRESHOLD AND OUTPUT NUMBER | THRESHOLD | IDEAL VALUE (MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE FROM PREV THRESHOLD | BEST FIT STRAIGHT LINE | |
|-----------------------------|-----------|------------------|---------------------------|-------|-------|------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 26 | 1110 0110 | 366.250 | 369.7 | 1.1 | 1.1 | 11.8 | 374.7 | -4.4 |
| 27 | 1110 0101 | 381.875 | 392.9 | -0.1 | 1.2 | 23.2 | 390.0 | 2.9 |
| 28 | 1110 0100 | 397.500 | 412.8 | -1.2 | -1.1 | 19.9 | 405.9 | 6.9 |
| 29 | 1110 0011 | 413.125 | 420.2 | 0.1 | -1.2 | 7.4 | 421.8 | -1.6 |
| 30 | 1110 0010 | 428.750 | 438.5 | 1.1 | 1.3 | 10.7 | 437.6 | 0.9 |
| 31 | 1110 0001 | 444.375 | 459.5 | 1.1 | 1.2 | 21.0 | 453.5 | 6.0 |
| 32 | 1110 0000 | 460.000 | 465.7 | -1.1 | 0.0 | 6.2 | 469.3 | -4.7 |
| 33 | 1101 1111 | 475.625 | 486.6 | -1.3 | -1.1 | 20.9 | 485.2 | 1.4 |
| 34 | 1101 1110 | 491.250 | 496.1 | -0.0 | -1.2 | 9.5 | 501.1 | -5.0 |
| 35 | 1101 1101 | 506.875 | 520.3 | 1.1 | 1.2 | 24.2 | 516.9 | 3.4 |
| 36 | 1101 1100 | 522.500 | 533.9 | -0.0 | 1.1 | 13.6 | 532.8 | 1.1 |
| 37 | 1101 1011 | 538.125 | 547.6 | -1.2 | -1.1 | 19.7 | 548.7 | -1.0 |
| 38 | 1101 1010 | 553.750 | 564.4 | -1.1 | -1.1 | 16.8 | 564.5 | -0.1 |
| 39 | 1101 1001 | 569.375 | 586.8 | 1.1 | 0.0 | 12.3 | 580.4 | 6.4 |
| 40 | 1101 1000 | 585.000 | 593.0 | 1.1 | 1.1 | 6.2 | 596.2 | -3.1 |
| 41 | 1101 0111 | 600.625 | 613.0 | -0.0 | 1.2 | 20.0 | 612.1 | 0.9 |
| 42 | 1101 0110 | 616.250 | 625.3 | -1.1 | -1.1 | 12.3 | 628.0 | -2.6 |
| 43 | 1101 0101 | 631.875 | 649.0 | -0.0 | -1.2 | 23.6 | 643.8 | 5.2 |
| 44 | 1101 0100 | 647.500 | 664.2 | 1.1 | 1.0 | 15.2 | 659.7 | 4.5 |
| 45 | 1101 0011 | 663.125 | 673.8 | 1.1 | 1.2 | 9.6 | 675.5 | -1.7 |
| 46 | 1101 0010 | 678.750 | 693.8 | -1.2 | -0.0 | 20.0 | 691.4 | 2.4 |
| 47 | 1101 0001 | 694.375 | 715.4 | -1.2 | -1.1 | 21.6 | 707.3 | 8.1 |
| 48 | 1101 0000 | 710.000 | 728.3 | -0.1 | -1.1 | 12.9 | 723.1 | 5.2 |
| 49 | 1100 1111 | 725.625 | 739.8 | -4.0 | 1.2 | 11.5 | 739.0 | 0.9 |
| 50 | 1100 1110 | 741.250 | 749.6 | -0.0 | 1.1 | 9.7 | 754.8 | -5.3 |
| 51 | 1100 1101 | 756.875 | 775.8 | -1.3 | -1.2 | 26.2 | 770.7 | 5.1 |

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190-7-26 THE BATTLE MAPPING BOX UNIT TEST MODEL 1.1 FTL 52N 2 PAGE 114

190-7-26 10271121 BATTLE MAPPING TEST UNIT PERFORMANCE & ADJUTANT ITEM.

190-7-26 10271121 BATTLE MAPPING TEST UNIT PERFORMANCE & ADJUTANT ITEM. (190-7-26) = 190-7-26 10271121

114C
114T
114S

114C

| THRESHOLD AND OUTPUT
NUMBER | THRESHOLD | IDEAL
VALUE
(DB) | ANALOG INPUT VOLTAGE (DB) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--------------------------------|-----------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 10 | 1001 0111 | 1600.63 | 1626.9 | -4.9 | 1.2 | 20.1 | 1627.2 | -0.3 |
| 105 | 1001 0110 | 1615.25 | 1636.5 | 0.0 | 1.1 | 9.6 | 1643.1 | -6.6 |
| 107 | 1001 0101 | 1631.88 | 1662.5 | -1.2 | -1.2 | 26.0 | 1658.9 | 3.6 |
| 108 | 1001 0100 | 1647.50 | 1677.9 | -1.1 | -1.1 | 15.3 | 1674.8 | 3.1 |
| 109 | 1001 0011 | 1663.13 | 1685.5 | 1.1 | 5.0 | 8.6 | 1690.6 | -4.1 |
| 110 | 1001 0010 | 1678.75 | 1704.4 | 1.2 | 1.2 | 17.9 | 1706.5 | -2.1 |
| 111 | 1001 0001 | 1694.38 | 1727.2 | -0.0 | 1.1 | 22.8 | 1722.4 | 4.8 |
| 112 | 1001 0000 | 1710.00 | 1743.2 | -1.2 | -1.2 | 15.0 | 1758.2 | 5.0 |
| 113 | 1000 1111 | 1725.63 | 1754.0 | -6.3 | -1.2 | 10.8 | 1754.1 | -0.1 |
| 114 | 1000 1110 | 1741.25 | 1761.1 | 1.2 | 1.2 | 7.1 | 1769.9 | -8.9 |
| 115 | 1000 1101 | 1756.88 | 1787.2 | 1.2 | 1.2 | 26.1 | 1785.8 | 1.3 |
| 116 | 1000 1100 | 1772.50 | 1804.0 | -1.1 | 0.0 | 16.9 | 1801.7 | 2.4 |
| 117 | 1000 1011 | 1788.13 | 1819.7 | -1.3 | -1.2 | 15.7 | 1817.5 | 2.2 |
| 118 | 1000 1010 | 1803.75 | 1842.3 | -2.2 | -1.3 | 12.6 | 1833.4 | -1.0 |
| 119 | 1000 1001 | 1819.38 | 1863.0 | 1.2 | 1.2 | 20.7 | 1849.3 | 3.8 |
| 120 | 1000 1000 | 1835.00 | 1866.0 | 0.0 | 1.2 | 14.0 | 1865.1 | 0.9 |
| 121 | 1000 0111 | 1850.63 | 1880.6 | -1.2 | -1.2 | 14.6 | 1881.0 | -0.4 |
| 122 | 1000 0110 | 1866.25 | 1890.3 | -1.1 | -1.2 | 9.7 | 1896.8 | -6.5 |
| 123 | 1000 0101 | 1881.88 | 1913.2 | 1.2 | -0.0 | 23.3 | 1912.7 | 1.0 |
| 124 | 1000 0100 | 1897.50 | 1932.3 | 1.2 | 1.1 | 18.6 | 1928.6 | 3.7 |
| 125 | 1000 0011 | 1913.13 | 1938.8 | 0.0 | 1.2 | 6.5 | 1944.4 | -5.6 |
| 126 | 1000 0010 | 1928.75 | 1958.1 | -1.1 | 1.2 | 19.2 | 1950.3 | -2.2 |
| 127 | 1000 0001 | 1944.38 | 1980.8 | 0.0 | -1.2 | 22.7 | 1976.1 | 4.7 |
| 128 | 1000 0000 | 1959.00 | 1993.1 | -6.9 | -6.9 | 12.3 | 1992.0 | 1.1 |
| 129 | 0111 1111 | 1975.63 | 2003.6 | -1.4 | 1.2 | 10.5 | 2007.9 | -4.3 |
| 130 | 0111 1110 | 1991.25 | 2016.7 | -1.2 | 0.0 | 13.1 | 2023.7 | -7.0 |

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HS-236 THEMATIC HANDLER BOX UNIT TEST MODEL.. FLT. S/N 3 PAGE 315

1981/12/01 10:51:21 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1111111111 AND THRESHOLD TEST CHAND= 7. SENSOR=9



0111

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 131 | 0111 1101 | 2006.88 | 2042.6 | -1.3 | -1.3 | 25.8 | 2039.6 | 3.0 |
| 132 | 0111 1100 | 2022.50 | 2055.8 | 0.1 | -1.2 | 13.2 | 2055.4 | 0.3 |
| 133 | 0111 1011 | 2038.13 | 2065.8 | 1.3 | 1.2 | 10.1 | 2071.3 | -5.5 |
| 134 | 0111 1010 | 2053.75 | 2086.3 | 0.0 | 1.2 | 20.4 | 2087.2 | -0.9 |
| 135 | 0111 1001 | 2069.38 | 2109.0 | -1.3 | -1.2 | 22.7 | 2103.0 | 6.0 |
| 136 | 0111 1000 | 2085.00 | 2112.4 | -1.2 | -1.2 | 3.4 | 2118.9 | -6.4 |
| 137 | 0111 0111 | 2100.63 | 2130.7 | -2.3 | 0.0 | 18.2 | 2134.8 | -4.1 |
| 138 | 0111 0110 | 2116.25 | 2143.8 | 1.2 | 1.1 | 13.1 | 2150.6 | -6.8 |
| 139 | 0111 0101 | 2131.88 | 2168.4 | -0.1 | 1.2 | 24.6 | 2166.5 | 1.9 |
| 140 | 0111 0100 | 2147.50 | 2184.5 | -1.3 | -1.2 | 16.1 | 2182.3 | 2.2 |
| 141 | 0111 0011 | 2163.13 | 2193.4 | 0.1 | -1.2 | 8.8 | 2198.2 | -4.8 |
| 142 | 0111 0010 | 2178.75 | 2215.2 | 1.2 | 1.3 | 22.4 | 2214.1 | 1.7 |
| 143 | 0111 0001 | 2194.38 | 2234.4 | 1.2 | 1.2 | 18.2 | 2229.9 | 4.5 |
| 144 | 0111 0000 | 2210.00 | 2244.5 | -1.1 | 0.1 | 10.1 | 2245.8 | -1.3 |
| 145 | 0110 1111 | 2225.63 | 2257.8 | -1.2 | -1.2 | 13.3 | 2261.6 | -3.8 |
| 146 | 0110 1110 | 2241.25 | 2269.7 | 0.1 | -1.3 | 11.9 | 2277.5 | -7.8 |
| 147 | 0110 1101 | 2256.88 | 2294.2 | 1.3 | 1.3 | 24.5 | 2293.4 | 0.8 |
| 148 | 0110 1100 | 2272.50 | 2310.6 | 0.1 | 1.3 | 16.4 | 2309.2 | 1.4 |
| 149 | 0110 1011 | 2288.13 | 2319.8 | -1.2 | -1.2 | 9.1 | 2325.1 | -5.3 |
| 150 | 0110 1010 | 2303.75 | 2341.2 | -1.3 | -1.2 | 21.4 | 2340.9 | 0.3 |
| 151 | 0110 1001 | 2319.38 | 2360.5 | 1.3 | 0.0 | 19.3 | 2356.8 | 3.7 |
| 152 | 0110 1000 | 2335.00 | 2371.0 | 1.2 | 1.2 | 10.5 | 2372.7 | -1.6 |
| 153 | 0110 0111 | 2350.63 | 2383.6 | -3.8 | 1.1 | 12.6 | 2388.5 | -4.9 |
| 154 | 0110 0110 | 2366.25 | 2397.8 | -1.2 | -1.2 | 14.2 | 2404.4 | -6.1 |
| 155 | 0110 0101 | 2381.88 | 2422.3 | 0.0 | -1.3 | 24.5 | 2420.2 | 2.1 |
| 156 | 0110 0100 | 2397.50 | 2440.0 | 1.2 | 1.2 | 12.6 | 2436.1 | 3.9 |
| 157 | 0110 0011 | 2413.13 | 2444.9 | 1.2 | 1.2 | 4.9 | 2452.0 | -7.1 |

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TR-726 TELEPHONIC METER BOX UNIT TEST MODEL 11, FL1, S/N 3 PAGE 316

1981 11/20 10:00:21 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

11/20/81 10:00:21 10:00:21 10:00:21 10:00:21 10:00:21 10:00:21 10:00:21 10:00:21 10:00:21 10:00:21



11/20/81

| THRESHOLD AND OUTPUT
ANALOG THRESHOLD | IDEAL
VOLTAGE
(V) | ANALOG INPUT VOLTAGE (V)
LEVELS RATIO = 1:1 | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|-------------------------|--|--------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 153 | 0110 0010 | 2468.25 | 2466.3 | -1.9 | 0.1 | 2467.8 | -1.5 |
| 159 | 0110 0001 | 2444.38 | 2433.3 | -11.0 | -1.2 | 2433.7 | -11.6 |
| 160 | 0110 0000 | 2460.00 | 2496.0 | 0.0 | 1.2 | 2499.6 | -3.6 |
| 161 | 0101 1111 | 2471.63 | 2508.7 | 1.6 | 1.4 | 2515.4 | -4.2 |
| 162 | 0101 1110 | 2491.25 | 2520.8 | 0.1 | 1.2 | 2531.3 | -10.5 |
| 163 | 0101 1101 | 2506.88 | 2548.1 | -1.3 | 1.3 | 2547.1 | 1.0 |
| 164 | 0101 1100 | 2522.50 | 2562.1 | -1.3 | -1.3 | 2563.0 | -0.2 |
| 165 | 0101 1011 | 2538.13 | 2571.4 | 1.1 | 0.1 | 2578.9 | -7.4 |
| 166 | 0101 1010 | 2553.75 | 2591.7 | 1.2 | 1.2 | 2594.7 | -1.1 |
| 167 | 0101 1001 | 2569.38 | 2613.4 | -0.1 | 0.4 | 2610.6 | 7.8 |
| 168 | 0101 1000 | 2585.00 | 2638.4 | -1.1 | 1.2 | 2626.4 | -0.1 |
| 169 | 0101 0111 | 2600.63 | 2637.5 | -3.6 | -1.2 | 2642.3 | -4.0 |
| 170 | 0101 0110 | 2616.25 | 2649.0 | 1.3 | 1.3 | 2658.2 | -9.2 |
| 171 | 0101 0101 | 2631.88 | 2673.9 | 1.2 | 1.3 | 2674.0 | -0.2 |
| 172 | 0101 0100 | 2647.50 | 2691.0 | -1.1 | 0.1 | 2689.9 | 1.1 |
| 173 | 0101 0011 | 2663.13 | 2699.0 | -1.2 | 1.2 | 2701.7 | -5.2 |
| 174 | 0101 0010 | 2678.75 | 2722.1 | 0.1 | 1.2 | 2721.6 | 0.9 |
| 175 | 0101 0001 | 2694.38 | 2740.2 | 1.3 | 1.3 | 2737.5 | 2.7 |
| 176 | 0101 0000 | 2710.00 | 2752.1 | 0.1 | 1.2 | 2751.3 | -0.8 |
| 177 | 0100 1111 | 2725.63 | 2763.1 | -1.1 | -1.0 | 2769.2 | -6.1 |
| 178 | 0100 1110 | 2741.25 | 2775.1 | -0.1 | -1.3 | 2785.1 | -10.0 |
| 179 | 0100 1101 | 2756.88 | 2799.8 | 1.3 | 0.0 | 2800.9 | -1.1 |
| 180 | 0100 1100 | 2772.50 | 2817.0 | 1.2 | 1.3 | 2816.8 | 0.2 |
| 181 | 0100 1011 | 2788.13 | 2834.4 | 0.0 | 1.2 | 2832.6 | -9.3 |
| 182 | 0100 1010 | 2803.75 | 2846.7 | -1.1 | -1.2 | 2848.5 | -1.8 |
| 183 | 0100 1001 | 2819.38 | 2867.5 | 0.1 | -1.2 | 2864.4 | 3.2 |

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TR 236 THERMATIC MATHS MUX UNIT TEST MODUL. 111. S/N 3 PAGE 319

1981/12/01 10:51:21 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TESTING IN THE PRESENCE OF THE TEST CHANNEL - 2. SENSORS = 9



DEC 01 81

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 237 0001 0011 | 3653.13 | 3719.6 | -0.9 | 0.3 | 9.8 | 3720.8 | -1.2 |
| 238 0001 0010 | 3678.25 | 3742.9 | -1.2 | -1.2 | 23.3 | 3736.7 | 6.2 |
| 239 0001 0001 | 3694.38 | 3762.8 | -0.1 | -1.1 | 19.9 | 3752.6 | 10.3 |
| 240 0001 0000 | 3710.00 | 3776.8 | 1.1 | 1.1 | 13.9 | 3768.4 | 8.3 |
| 241 0000 1111 | 3725.63 | 3783.1 | 1.1 | 1.3 | 6.3 | 3784.3 | -1.2 |
| 242 0000 1110 | 3741.25 | 3796.9 | -1.6 | 0.2 | 13.8 | 3800.2 | -3.2 |
| 243 0000 1101 | 3756.88 | 3825.2 | -1.8 | -1.9 | 28.2 | 3816.0 | 9.1 |
| 244 0000 1100 | 3772.50 | 3839.3 | 1.2 | 0.0 | 14.1 | 3831.9 | 7.4 |
| 245 0000 1011 | 3788.13 | 3847.4 | 1.2 | 1.3 | 8.1 | 3847.7 | -0.4 |
| 246 0000 1010 | 3803.75 | 3862.7 | -0.1 | 1.3 | 20.3 | 3863.6 | 4.1 |
| 247 0000 1001 | 3819.38 | 3891.2 | -1.4 | -1.2 | 23.4 | 3879.5 | 11.7 |
| 248 0000 1000 | 3835.00 | 3903.9 | 0.1 | -0.5 | 12.7 | 3895.3 | 8.6 |
| 249 0000 0111 | 3850.63 | 3912.2 | -2.1 | 0.0 | 8.2 | 3911.2 | 1.0 |
| 250 0000 0110 | 3866.25 | 3925.6 | 1.2 | 1.2 | 13.4 | 3927.0 | -1.4 |
| 251 0000 0101 | 3881.88 | 3952.9 | -1.5 | 0.0 | 27.3 | 3942.9 | 10.0 |
| 252 0000 0100 | 3897.50 | 3972.7 | -1.2 | -1.0 | 19.8 | 3958.8 | 13.9 |
| 253 0000 0011 | 3913.13 | 3977.3 | 0.2 | 3.0 | 4.6 | 3974.6 | 2.7 |
| 254 0000 0010 | 3928.75 | 3994.9 | 1.2 | 6.7 | 17.6 | 3990.5 | 1.4 |
| 255 0000 0001 | 3944.38 | 4019.3 | 1.2 | 1.5 | 24.4 | 4006.3 | 13.0 |

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US-215 THE AUTOMATIC POWER SUPPLY UNIT TEST MODEL 11, P.L. S/N 3 PAGE 322

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3-1-60 101572158 101572158 101572158 101572158 101572158 101572158 101572158 101572158 101572158 101572158



| TEST SUBJECT AND OUTPUT NUMBER | THRESHOLD | IDEAL VALUE (G2) | ANALOG INPUT VOLTAGE (G2) | | INCREASE FROM FREQ THRESHOLD | BEST FIT STRAIGHT LINE | |
|--------------------------------|-----------|------------------|---------------------------|-------|------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | | POINT | DEVIATION |
| 25 | 1110 0110 | 366.250 | 367.8 | 1.0 | 15.7 | 371.3 | -3.5 |
| 26 | 1110 0101 | 381.875 | 381.0 | 1.0 | 1.1 | 387.2 | 3.8 |
| 28 | 1110 0100 | 392.500 | 410.4 | 1.1 | 0.1 | 403.0 | 7.3 |
| 29 | 1110 0011 | 413.125 | 412.8 | -1.1 | -1.0 | 418.9 | -1.1 |
| 30 | 1110 0010 | 428.750 | 436.3 | 1.0 | 0.0 | 434.7 | 1.6 |
| 31 | 1110 0001 | 444.375 | 457.3 | 1.0 | 1.1 | 450.6 | 6.7 |
| 32 | 1110 0000 | 460.000 | 460.9 | 0.0 | 1.0 | 466.4 | -5.5 |
| 33 | 1101 1111 | 475.625 | 479.2 | -1.1 | -1.0 | 482.2 | -3.0 |
| 34 | 1101 1110 | 491.250 | 493.9 | -1.0 | 1.1 | 498.1 | 4.2 |
| 35 | 1101 1101 | 506.875 | 517.9 | 1.0 | 0.0 | 513.9 | 4.0 |
| 36 | 1101 1100 | 522.500 | 531.9 | 1.0 | 1.1 | 529.8 | 2.2 |
| 37 | 1101 1011 | 538.125 | 545.2 | -1.1 | 0.0 | 545.3 | -0.4 |
| 38 | 1101 1010 | 553.750 | 562.4 | -1.1 | -1.0 | 561.5 | 1.0 |
| 39 | 1101 1001 | 569.375 | 583.7 | -0.0 | 1.1 | 577.3 | 8.4 |
| 40 | 1101 1000 | 585.000 | 591.1 | 1.0 | 1.0 | 593.2 | -2.0 |
| 41 | 1101 0111 | 600.625 | 605.7 | 1.1 | 1.1 | 609.0 | -3.4 |
| 42 | 1101 0110 | 616.250 | 623.1 | -1.1 | 0.0 | 624.9 | -1.7 |
| 43 | 1101 0101 | 631.875 | 646.7 | -1.2 | 1.1 | 630.7 | 6.0 |
| 44 | 1101 0100 | 647.500 | 661.9 | 1.0 | 0.0 | 656.5 | 5.4 |
| 45 | 1101 0011 | 663.125 | 671.3 | 1.0 | 1.1 | 672.4 | -1.1 |
| 46 | 1101 0010 | 678.750 | 690.7 | -0.1 | 0.7 | 688.2 | 2.4 |
| 47 | 1101 0001 | 694.375 | 712.9 | -1.1 | 1.1 | 704.1 | 8.9 |
| 48 | 1101 0000 | 710.000 | 725.6 | -1.1 | 1.0 | 719.9 | 5.7 |
| 49 | 1100 1111 | 725.625 | 732.3 | 1.0 | 0.0 | 735.8 | -3.5 |
| 50 | 1100 1110 | 741.250 | 747.3 | 1.0 | 1.1 | 751.6 | -4.3 |
| 51 | 1100 1101 | 756.875 | 773.1 | -1.2 | 0.0 | 767.5 | 5.6 |

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RS-7000 THERMAL POWER GUN UNIT TEST MODEL 2, FILE 5703 PAGE 324

1901/12/01 10272258 PUNCH 12 TEST UNIT PERFORMANCE 12 GUN UNIT TEST

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

HAC
1001
027

00101

| ANALOG INPUT CHANNEL | ANALOG INPUT CHANNEL | ANALOG INPUT CHANNEL | ANALOG INPUT CHANNEL | ANALOG INPUT CHANNEL | ANALOG INPUT CHANNEL | ANALOG INPUT CHANNEL | BEST FIT STRAIGHT LINE | |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------------|-----------|
| | | | | | | | POINT | DEVIATION |
| 75 | 1011 0001 | 1194.783 | 1220.6 | -1.1 | 0.0 | 23.5 | 1211.1 | 9.4 |
| 80 | 1011 0000 | 1210.00 | 1233.2 | -1.1 | -1.0 | 12.6 | 1227.0 | 6.2 |
| 81 | 1010 1111 | 1227.63 | 1240.0 | -0.0 | 1.1 | 6.8 | 1242.8 | -2.8 |
| 82 | 1010 1110 | 1241.27 | 1253.6 | 1.1 | 1.0 | 13.6 | 1258.7 | -5.0 |
| 83 | 1010 1101 | 1256.88 | 1278.8 | 1.1 | 1.1 | 20.2 | 1274.5 | 4.3 |
| 84 | 1010 1100 | 1272.50 | 1290.0 | -1.0 | 0.0 | 11.1 | 1290.4 | 0.4 |
| 85 | 1010 1011 | 1288.13 | 1306.0 | 1.1 | 1.1 | 16.0 | 1306.2 | -0.2 |
| 86 | 1010 1010 | 1303.75 | 1324.2 | -1.8 | 0.0 | 18.2 | 1322.1 | 2.1 |
| 87 | 1010 1001 | 1319.38 | 1346.2 | 1.1 | 1.1 | 21.0 | 1352.9 | 2.3 |
| 88 | 1010 1000 | 1335.00 | 1375.8 | 0.0 | 1.0 | 10.5 | 1373.8 | 2.1 |
| 89 | 1010 0111 | 1350.63 | 1372.4 | -1.3 | -1.4 | 16.6 | 1369.6 | 2.8 |
| 90 | 1010 0110 | 1366.25 | 1382.6 | -1.0 | 1.1 | 10.2 | 1385.4 | -2.8 |
| 91 | 1010 0101 | 1381.88 | 1405.4 | 1.1 | 0.0 | 22.8 | 1401.3 | 4.1 |
| 92 | 1010 0100 | 1397.50 | 1424.2 | 1.0 | 1.0 | 18.8 | 1417.1 | 2.1 |
| 93 | 1010 0011 | 1413.13 | 1432.1 | -1.1 | -0.0 | 7.9 | 1433.0 | -0.8 |
| 94 | 1010 0010 | 1428.75 | 1450.2 | -1.1 | -1.1 | 18.5 | 1448.8 | 1.8 |
| 95 | 1010 0001 | 1444.38 | 1472.8 | 0.1 | 1.1 | 22.1 | 1464.7 | 8.1 |
| 96 | 1010 0000 | 1460.00 | 1480.9 | 1.0 | 0.9 | 8.1 | 1480.5 | 0.4 |
| 97 | 1001 1111 | 1475.63 | 1491.0 | 1.1 | 1.1 | 10.0 | 1496.4 | -5.4 |
| 98 | 1001 1110 | 1491.27 | 1506.5 | -1.1 | 0.1 | 15.6 | 1512.2 | -5.7 |
| 99 | 1001 1101 | 1506.88 | 1532.1 | 1.0 | 1.1 | 20.6 | 1528.1 | 4.1 |
| 100 | 1001 1100 | 1522.50 | 1548.2 | 1.0 | 0.0 | 6.0 | 1547.9 | -5.7 |
| 101 | 1001 1011 | 1538.13 | 1574.0 | 1.1 | 1.1 | 18.8 | 1569.7 | -2.7 |
| 102 | 1001 1010 | 1553.75 | 1575.3 | -2.1 | 1.1 | 18.2 | 1575.6 | -0.3 |
| 103 | 1001 1001 | 1569.38 | 1598.4 | 1.3 | -1.4 | 23.1 | 1591.4 | 6.9 |
| 104 | 1001 1000 | 1585.00 | 1603.8 | -1.0 | -1.1 | 11.4 | 1607.3 | -3.3 |

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FB-706 THERMATIC MOPPER MIX UNIT TEST MODEL.. 111. S/N 3 PAGE 327

1981/12/01 10:52:58 PENALTY TEST FUEL PERFORMANCE @ AMBIENT TEMP.

TEST RESULTS (200) FUEL-5.000000 11.130 0.000000 7. SENSURE=100



11/11/81

| HRS | THRESHOLD | A/D OUTPUT | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
NOMINAL | INFEED VOLTAGE (MV)
LEVELS RATIO-
LOWER | 1:1
UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|-----|-----------|------------|------------------------|--------------------------------------|---|--------------|------------------------------------|------------------------|-----------|
| | | | | | | | | POINT | DEVIATION |
| 158 | 0110 | 0010 | 2431.25 | 2464.9 | -3.9 | 1.1 | 23.9 | 2463.0 | 1.9 |
| 159 | 0110 | 0001 | 2444.38 | 2484.3 | -1.1 | -1.1 | 19.4 | 2478.8 | 5.5 |
| 160 | 0110 | 0000 | 2460.66 | 2491.3 | -1.0 | -1.0 | 7.0 | 2494.6 | -3.3 |
| 161 | 0101 | 1111 | 2471.63 | 2503.7 | -1.2 | 1.1 | 12.4 | 2510.5 | -6.7 |
| 162 | 0101 | 1110 | 2491.25 | 2517.0 | 0.9 | 1.0 | 13.3 | 2526.3 | -9.3 |
| 163 | 0101 | 1101 | 2506.88 | 2543.6 | -1.1 | -0.1 | 26.6 | 2542.2 | 1.5 |
| 164 | 0101 | 1100 | 2522.50 | 2557.7 | -3.6 | -1.1 | 14.0 | 2558.0 | -0.3 |
| 165 | 0101 | 1011 | 2538.13 | 2568.7 | -0.0 | -1.1 | 11.0 | 2573.9 | -5.1 |
| 166 | 0101 | 1010 | 2553.75 | 2586.9 | -1.3 | -1.3 | 18.2 | 2589.7 | -7.8 |
| 167 | 0101 | 1001 | 2569.38 | 2608.7 | 1.1 | 1.1 | 21.8 | 2605.6 | 3.2 |
| 168 | 0101 | 1000 | 2585.00 | 2614.6 | -1.1 | -1.0 | 5.9 | 2621.4 | -6.8 |
| 169 | 0101 | 0111 | 2600.63 | 2631.8 | -1.1 | -1.0 | 17.2 | 2637.3 | -5.4 |
| 170 | 0101 | 0110 | 2616.25 | 2644.9 | 1.1 | 1.0 | 13.1 | 2653.1 | -8.2 |
| 171 | 0101 | 0101 | 2631.88 | 2669.2 | 0.9 | 0.8 | 24.2 | 2668.9 | 0.2 |
| 172 | 0101 | 0100 | 2647.50 | 2685.3 | 0.0 | 0.9 | 16.1 | 2684.8 | 0.5 |
| 173 | 0101 | 0011 | 2663.13 | 2695.2 | -1.1 | -1.1 | 9.9 | 2700.6 | -5.5 |
| 174 | 0101 | 0010 | 2678.75 | 2714.0 | -1.1 | 2.8 | 18.8 | 2716.5 | -2.5 |
| 175 | 0101 | 0001 | 2694.38 | 2735.7 | 1.1 | 1.1 | 21.7 | 2732.3 | 3.3 |
| 176 | 0101 | 0000 | 2710.00 | 2748.4 | 1.1 | 1.1 | 12.7 | 2748.2 | 0.3 |
| 177 | 0100 | 1111 | 2725.63 | 2755.1 | -1.1 | 2.4 | 6.7 | 2764.0 | -8.9 |
| 178 | 0100 | 1110 | 2741.25 | 2770.6 | -1.1 | -1.1 | 15.5 | 2779.9 | -9.3 |
| 179 | 0100 | 1101 | 2756.88 | 2796.2 | 0.6 | 0.6 | 25.6 | 2795.7 | 0.5 |
| 180 | 0100 | 1100 | 2772.50 | 2812.5 | -6.1 | 1.1 | 16.3 | 2811.6 | 1.0 |
| 181 | 0100 | 1011 | 2788.13 | 2820.2 | 1.1 | 1.1 | 7.6 | 2827.4 | -7.2 |
| 182 | 0100 | 1010 | 2803.75 | 2838.3 | -1.1 | -1.1 | 18.2 | 2843.2 | -4.9 |
| 183 | 0100 | 1001 | 2819.38 | 2862.6 | -1.2 | -1.1 | 24.3 | 2859.1 | 3.5 |

ORIGINAL PAGE 19
OF POOR QUALITY



Q. 317

| RESEPTED
DATE | ZODIUM
TIME | ZODIUM
TIME | LOCAL
TIME | INSTRUMENT
LEVELS | | CORRECTION
1-2 | CORRECTION
3-4 | BEST FIT STRAIGHT LINE | |
|------------------|----------------|----------------|---------------|----------------------|--------|-------------------|-------------------|------------------------|-----------|
| | | | | INSTRUMENT
LEVELS | LEVELS | | | POINT | DEVIATION |
| 216 | 0010 | 1110 | 3241.25 | 3278.8 | -1.1 | -1.1 | 19.2 | 3286.9 | -8.1 |
| 217 | 0010 | 1101 | 3256.80 | 3305.2 | -1.2 | -1.0 | 22.9 | 3302.8 | 3.9 |
| 218 | 0010 | 1100 | 3272.50 | 3320.4 | -8.4 | 0.0 | 11.2 | 3318.6 | 1.8 |
| 219 | 0010 | 1011 | 3288.13 | 3329.1 | 1.1 | 1.1 | 18.6 | 3334.5 | -5.4 |
| 219 | 0010 | 1010 | 3301.25 | 3348.9 | -0.5 | 1.0 | 19.9 | 3350.3 | -1.4 |
| 219 | 0010 | 1001 | 3319.38 | 3372.2 | -1.3 | -1.2 | 23.3 | 3366.2 | 6.1 |
| 216 | 0010 | 1000 | 3335.00 | 3383.5 | -1.1 | -1.1 | 11.2 | 3382.0 | 1.5 |
| 217 | 0010 | 0111 | 3350.63 | 3392.8 | -1.4 | 1.2 | 9.3 | 3397.8 | -5.1 |
| 218 | 0010 | 0110 | 3366.25 | 3402.0 | 1.1 | 1.1 | 14.2 | 3413.2 | -5.2 |
| 219 | 0010 | 0101 | 3381.88 | 3413.1 | -1.3 | 0.0 | 26.1 | 3429.5 | 3.6 |
| 220 | 0010 | 0100 | 3397.50 | 3452.0 | -1.2 | -1.1 | 18.8 | 3445.4 | 6.6 |
| 221 | 0010 | 0011 | 3413.13 | 3458.0 | 0.1 | -1.3 | 5.9 | 3461.2 | -3.3 |
| 222 | 0010 | 0010 | 3428.75 | 3480.1 | -3.4 | 1.2 | 22.1 | 3477.1 | 3.0 |
| 223 | 0010 | 0001 | 3444.38 | 3499.2 | 1.1 | 1.1 | 19.1 | 3492.9 | 6.3 |
| 224 | 0010 | 0000 | 3460.00 | 3510.8 | -1.1 | 1.0 | 11.5 | 3508.8 | 2.0 |
| | | | | | | | | | |
| 225 | 0001 | 1111 | 3475.63 | 3520.6 | -1.1 | -1.0 | 9.8 | 3524.6 | -4.0 |
| 226 | 0001 | 1110 | 3491.25 | 3531.0 | 0.9 | 0.0 | 12.4 | 3540.5 | -7.4 |
| 227 | 0001 | 1101 | 3506.88 | 3560.9 | 1.0 | 1.1 | 22.9 | 3556.3 | 4.6 |
| 228 | 0001 | 1100 | 3522.50 | 3569.8 | -4.3 | 1.2 | 18.9 | 3572.1 | -2.3 |
| 229 | 0001 | 1011 | 3538.13 | 3585.5 | -1.0 | -1.0 | 15.2 | 3588.0 | -2.5 |
| 230 | 0001 | 1010 | 3553.75 | 3604.6 | -1.1 | -1.1 | 19.0 | 3603.8 | 0.2 |
| 231 | 0001 | 1001 | 3569.38 | 3626.2 | 1.0 | 1.2 | 12.2 | 3619.2 | 7.0 |
| 232 | 0001 | 1000 | 3585.00 | 3630.9 | 1.1 | 1.1 | 4.2 | 3635.5 | -4.6 |
| 233 | 0001 | 0111 | 3600.63 | 3642.1 | -1.2 | 2.5 | 16.2 | 3651.4 | -4.3 |
| 234 | 0001 | 0110 | 3616.25 | 3661.8 | -0.5 | -1.1 | 16.2 | 3662.2 | -3.4 |
| 235 | 0001 | 0101 | 3631.88 | 3689.2 | -0.1 | 0.6 | 21.4 | 3683.1 | 6.2 |
| 236 | 0001 | 0100 | 3647.50 | 3704.1 | 1.9 | 1.1 | 19.8 | 3698.9 | 5.2 |

ORIGINAL PAGE IS
OF POOR
QUALITY

```
34.0.34.3-1 OK! 144CF3440110 1F35F (LOAD= 2% SENSORE=10)
```

HAC
TEST
527

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | VALUE
(VOLT) | ANALOG INPUT VOLTAGE (NO)
THRESHOLD RATIO | DIFFER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT | DEVIATION |
|---------------------|-------------------------|-----------------|--|--------|------------------------------------|---------------------------------|-----------|
| 237 | 0001 0011 | 3673.13 | 3713.0 | 1.1 | 1.1 | 3714.8 | -1.7 |
| 238 | 0001 0010 | 3673.75 | 3736.6 | -1.2 | -1.0 | 3730.6 | 6.0 |
| 239 | 0001 0001 | 3694.38 | 3756.7 | -1.3 | 1.1 | 3745.4 | 10.2 |
| 240 | 0001 0000 | 3710.00 | 3771.1 | 1.1 | 0.1 | 3762.3 | 8.8 |
| 241 | 0000 1111 | 3725.63 | 3776.2 | 1.0 | 1.1 | 3778.1 | -1.9 |
| 242 | 0000 1110 | 3741.25 | 3789.4 | -0.1 | 1.0 | 3794.0 | -4.6 |
| 243 | 0000 1101 | 3756.88 | 3818.8 | -1.3 | -1.1 | 3809.8 | 8.9 |
| 244 | 0000 1100 | 3772.50 | 3826.8 | -1.1 | 6.6 | 3825.7 | 1.1 |
| 245 | 0000 1011 | 3788.13 | 3841.3 | 1.1 | 1.2 | 3841.5 | -0.2 |
| 246 | 0000 1010 | 3803.75 | 3861.3 | 1.0 | 1.2 | 3857.4 | 4.0 |
| 247 | 0000 1001 | 3819.38 | 3884.9 | -1.4 | 0.0 | 3873.2 | 11.7 |
| 248 | 0000 1000 | 3835.00 | 3898.8 | -1.0 | -0.9 | 3889.1 | 9.3 |
| 249 | 0000 0111 | 3850.63 | 3906.5 | -2.3 | -1.1 | 3904.9 | 1.6 |
| 250 | 0000 0110 | 3856.25 | 3919.8 | 1.1 | 1.1 | 3920.8 | -0.9 |
| 251 | 0000 0101 | 3871.88 | 3947.1 | 6.7 | 1.1 | 3936.6 | 10.5 |
| 252 | 0000 0100 | 3887.50 | 3966.5 | -1.2 | 1.2 | 3952.4 | 14.0 |
| 253 | 0000 0011 | 3913.13 | 3971.3 | -1.1 | -1.1 | 3968.3 | 3.0 |
| 254 | 0000 0010 | 3928.75 | 3993.8 | -3.9 | 0.1 | 3984.1 | 9.7 |
| 255 | 0000 0001 | 3944.38 | 4013.0 | 1.6 | 1.2 | 4000.0 | 13.0 |

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OF POOR QUALITY

HS-236 THETA-MATIC MAPPER MUX UNIT TEST MODEL... FLT. S/N 3 PAGE 331

1981/12/01 11:04:21 QUALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.

*** TEST *** THRESHOLD TEST (PASS) 7, SENSOR=11



11/01/81

FILE 1) RMS ERROR 2) THRESHOLD INCREMENT (+/- 0.0 = THRESH INC = 31.2)

FILE 3) REMAINING DATA ARE FOR INFORMATION ONLY

*** TEST *** THRESHOLD TEST (PASS) 7, SENSOR=11

DEVIATION OF SLOPE FROM IDEAL IS: 1.544%

DEVIATION IS: -37.2MV

COEFFICIENT OF DETERMINATION IS: RXX2= .99998590

ANALOG INPUT DURING DC RESTORE IS: 63.9MV

*** TEST *** THRESHOLD TEST (PASS) 7, SENSOR=11

*** TEST *** THRESHOLD TEST (PASS) 7, SENSOR=11

| MAXIMUM | THRESHOLD | AVERAGE | MINIMUM | THRESHOLD | STANDARD DEVIATION |
|---------|-----------|----------|---------|-----------|--------------------|
| 28.6MV | 227 | 15.938MV | 2.6MV | 200 | 5.710MV |

*** TEST *** THRESHOLD TEST (PASS) 7, SENSOR=11

| MAXIMUM | THRESHOLD | AVERAGE | MINIMUM | THRESHOLD | STANDARD DEVIATION |
|---------|-----------|----------|---------|-----------|--------------------|
| 2.0MV | 238 | -0.670MV | -7.1MV | 228 | 1.687MV |

*** TEST *** THRESHOLD TEST (PASS) 7, SENSOR=11

| MAXIMUM | THRESHOLD | AVERAGE | MINIMUM | THRESHOLD | STANDARD DEVIATION |
|---------|-----------|---------|---------|-----------|--------------------|
| 6.0MV | 211 | 0.068MV | -1.9MV | 200 | 1.180MV |

TEST PASSED

ORIGINAL PAGE 13
OF POOR QUALITY

PAGE 332

1. The first step is to identify the problem or question that needs to be answered.



11 11 53

-2-

ORIGINAL PAGE IS
OF POOR QUALITY

MAC
T
527

FILE 01 '84

ORIGINAL PAGE IS
OF POOR QUALITY

| ANALOG INPUT CHANNEL NUMBER | DIGITAL OUTPUT CHANNEL NUMBER | DIGITAL VALUE (MV) | ANALOG INPUT VOLTAGE NOMINAL | INPUT VOLTAGE LEVELS RATIO-LOWER | OUTPUT VOLTAGE LEVELS RATIO-UPPER | INCREASE FROM INPUT CHANNEL NUMBER | BEST FIT STRAIGHT LINE POINT | DEVIATION |
|-----------------------------|-------------------------------|--------------------|------------------------------|----------------------------------|-----------------------------------|------------------------------------|------------------------------|-----------|
| 26 | 1110 0110 | 366.250 | 371.3 | -0.6 | -0.6 | 11.0 | 375.3 | -4.0 |
| 27 | 1110 0101 | 385.875 | 394.6 | -1.1 | -1.0 | 23.3 | 391.2 | 3.4 |
| 28 | 1110 0100 | 397.500 | 412.4 | 1.1 | 1.1 | 12.8 | 402.0 | 5.3 |
| 29 | 1110 0011 | 413.125 | 420.1 | 0.9 | 0.9 | 7.7 | 422.9 | -2.8 |
| 30 | 1110 0010 | 423.750 | 440.0 | -0.4 | -0.1 | 19.8 | 438.8 | 1.2 |
| 31 | 1110 0001 | 444.375 | 461.2 | -1.4 | -1.3 | 21.3 | 454.6 | 6.6 |
| 32 | 1110 0000 | 460.000 | 466.8 | 0.0 | -1.2 | 5.6 | 470.5 | -3.7 |
| | | | | | | | | |
| 33 | 1101 1111 | 475.625 | 485.8 | 1.2 | 1.3 | 19.0 | 486.4 | -0.5 |
| 34 | 1101 1110 | 491.250 | 495.9 | 0.6 | 0.6 | 10.1 | 502.2 | -6.3 |
| 35 | 1101 1101 | 506.875 | 522.3 | -1.2 | 1.1 | 26.4 | 518.1 | 4.2 |
| 36 | 1101 1100 | 522.500 | 535.8 | -1.1 | -1.1 | 13.5 | 534.0 | 1.8 |
| 37 | 1101 1011 | 538.125 | 552.3 | -3.2 | 0.0 | 16.4 | 549.8 | 2.4 |
| 38 | 1101 1010 | 553.750 | 566.5 | -1.5 | 0.2 | 14.2 | 565.7 | 0.8 |
| 39 | 1101 1001 | 569.375 | 587.2 | -0.0 | 1.4 | 20.7 | 581.6 | 5.6 |
| 40 | 1101 1000 | 585.000 | 594.9 | -0.9 | -1.0 | 7.7 | 592.4 | -2.5 |
| 41 | 1101 0111 | 600.625 | 615.0 | -5.3 | -1.2 | 20.1 | 613.3 | 1.7 |
| 42 | 1101 0110 | 616.250 | 625.4 | 0.6 | 0.6 | 10.4 | 629.2 | -3.8 |
| 43 | 1101 0101 | 631.875 | 648.8 | 0.9 | 1.0 | 23.4 | 645.0 | 3.2 |
| 44 | 1101 0100 | 647.500 | 666.0 | -1.1 | -0.0 | 17.2 | 660.9 | 5.1 |
| 45 | 1101 0011 | 663.125 | 680.9 | -1.2 | -1.2 | 15.0 | 676.8 | 4.2 |
| 46 | 1101 0010 | 678.750 | 694.5 | 0.0 | -0.2 | 13.6 | 692.6 | 1.9 |
| 47 | 1101 0001 | 694.375 | 714.8 | 1.3 | 1.3 | 20.3 | 708.5 | 6.3 |
| 48 | 1101 0000 | 710.000 | 728.2 | 0.0 | 0.6 | 13.4 | 724.4 | 3.9 |
| | | | | | | | | |
| 49 | 1100 1111 | 725.625 | 741.8 | -1.3 | -1.3 | 13.6 | 740.2 | 1.6 |
| 50 | 1100 1110 | 741.250 | 751.5 | -0.2 | -0.6 | 9.7 | 756.1 | -4.6 |
| 51 | 1100 1101 | 756.875 | 775.8 | 1.0 | 0.0 | 24.3 | 772.0 | 3.9 |

5-2736 AUTOMATIC MAGNETIC MIX UNIT TEST MODULE, FLT. 5/28/63 PAGE 334

201-17201 11:04334 CENSITY TEST UNIT PERFORMANCE @ AMBIENT TEMP.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99

HAC
TEST
S27

DEC 01 '81

| REVERSED A/D INPUT
NUMBER | A/D INPUT
THRESHOLD | INPUT
VOLTAGE
(MV) | ANALOG INPUT VOLTAGE (MV) | | (PO)
1:1
DIFFER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | |
|------------------------------|------------------------|--------------------------|---------------------------|--------|-----------------------|------------------------------------|------------------------|-----------|------|
| | | | NOMINAL | LOWER | | | POINT | DEVIATION | |
| 52 | 1100 | 1100 | 772.500 | 792.0 | 1.0 | 1.1 | 16.2 | 787.8 | 4.2 |
| 53 | 1100 | 1011 | 788.125 | 806.6 | -4.9 | 1.2 | 14.6 | 803.7 | 2.9 |
| 54 | 1100 | 1010 | 803.250 | 819.6 | -0.7 | -0.7 | 12.9 | 819.6 | 0.0 |
| 55 | 1100 | 1001 | 819.375 | 842.7 | 0.0 | -1.3 | 23.1 | 835.4 | 7.2 |
| 56 | 1100 | 1000 | 835.000 | 853.0 | 1.4 | 1.3 | 10.4 | 851.3 | 1.7 |
| 57 | 1100 | 0111 | 850.625 | 867.8 | -4.1 | 1.2 | 14.7 | 867.2 | 0.6 |
| 58 | 1100 | 0110 | 865.250 | 880.2 | -0.7 | 0.0 | 12.4 | 883.0 | -2.8 |
| 59 | 1100 | 0101 | 881.875 | 903.4 | -0.9 | -0.9 | 23.2 | 898.9 | 4.5 |
| 60 | 1100 | 0100 | 897.500 | 922.7 | -0.0 | -1.1 | 19.3 | 914.8 | 8.0 |
| 61 | 1100 | 0011 | 913.125 | 933.3 | -3.6 | 1.2 | 10.5 | 930.6 | 2.7 |
| 62 | 1100 | 0010 | 930.250 | 947.4 | 0.1 | 0.6 | 14.1 | 946.5 | 1.0 |
| 63 | 1100 | 0001 | 944.375 | 969.6 | 0.3 | -1.4 | 22.1 | 962.4 | 7.2 |
| 64 | 1100 | 0000 | 960.000 | 982.9 | -1.2 | -1.2 | 13.3 | 978.2 | 4.6 |
| | | | | | | | | | |
| 65 | 1011 | 1111 | 975.625 | 991.5 | 4.5 | 0.0 | 12.6 | 994.1 | 1.4 |
| 66 | 1011 | 1110 | 991.250 | 1004.8 | 0.6 | 0.5 | 9.1 | 1010.0 | -5.2 |
| 67 | 1011 | 1101 | 1006.88 | 1030.5 | 0.0 | 1.1 | 25.7 | 1025.3 | 4.7 |
| 68 | 1011 | 1100 | 1022.50 | 1044.3 | -1.1 | 1.1 | 13.8 | 1041.7 | 2.6 |
| 69 | 1011 | 1011 | 1038.13 | 1062.9 | -5.3 | 1.2 | 18.5 | 1057.6 | 5.3 |
| 70 | 1011 | 1010 | 1053.75 | 1074.6 | -1.4 | 1.2 | 11.8 | 1073.4 | 1.2 |
| 71 | 1011 | 1001 | 1069.38 | 1097.1 | 0.1 | 0.7 | 22.4 | 1089.1 | 7.8 |
| 72 | 1011 | 1000 | 1085.00 | 1100.9 | 1.0 | 0.0 | 3.8 | 1105.2 | -4.2 |
| 73 | 1011 | 0111 | 1100.63 | 1123.8 | -1.3 | 1.3 | 22.9 | 1121.0 | 2.8 |
| 74 | 1011 | 0110 | 1116.25 | 1133.8 | 0.0 | -0.7 | 10.0 | 1136.9 | -3.1 |
| 75 | 1011 | 0101 | 1131.88 | 1157.0 | 1.2 | 1.2 | 23.2 | 1152.8 | 4.3 |
| 76 | 1011 | 0100 | 1147.50 | 1171.9 | 0.0 | 1.1 | 14.8 | 1168.6 | 3.3 |
| 77 | 1011 | 0011 | 1163.13 | 1189.5 | -1.1 | -1.1 | 17.6 | 1184.5 | 5.0 |
| 78 | 1011 | 0010 | 1178.75 | 1201.8 | 0.2 | 0.2 | 12.3 | 1200.4 | 1.5 |

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OF POOR QUALITY

FIG. 2-65 THERMAL CYCLER BOX UNIT TEST MODEL 1011, SZN 3 PAGE 305

1201/1201 11:04:39 THERMAL CYCLER TEST FOR THERMAL CYCLER 1011

1. 1011 11:04:39 11:04:39 11:04:39 11:04:39 11:04:39 11:04:39 11:04:39 11:04:39 11:04:39



| THERMAL CYCLER TEST | THERMAL CYCLER TEST | THERMAL CYCLER TEST | THERMAL CYCLER TEST | THERMAL CYCLER TEST | THERMAL CYCLER TEST | THERMAL CYCLER TEST | TEST FOR STRAIGHT LINE | |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------------|-----------|
| | | | | | | | POINT | DEVIATION |
| 22 | 1011 0001 | 1194.70 | 1223.3 | 1.4 | -0.0 | 21.4 | 1216.2 | 7.0 |
| 30 | 1011 0000 | 1210.00 | 1235.6 | 1.3 | 1.4 | 12.3 | 1232.1 | 3.5 |
| 33 | 1010 1111 | 1225.63 | 1243.9 | 1.4 | 6.0 | 31.3 | 1248.0 | -4.1 |
| 37 | 1010 1110 | 1241.25 | 1258.4 | -0.6 | 0.6 | 14.5 | 1253.8 | -5.4 |
| 38 | 1010 1101 | 1256.88 | 1284.5 | 0.0 | 1.1 | 26.1 | 1279.7 | 4.8 |
| 44 | 1010 1100 | 1272.50 | 1299.1 | -5.2 | 1.1 | 14.6 | 1295.5 | 3.5 |
| 45 | 1010 1011 | 1288.13 | 1314.6 | -4.3 | 1.3 | 15.5 | 1311.4 | 3.1 |
| 46 | 1010 1010 | 1303.25 | 1326.4 | 0.7 | 2.35 | 11.3 | 1322.3 | 0.9 |
| 47 | 1010 1001 | 1319.88 | 1350.4 | 1.3 | 1.3 | 24.0 | 1343.1 | 7.2 |
| 48 | 1010 1000 | 1335.00 | 1359.9 | 1.1 | 0.1 | 9.5 | 1359.0 | 0.9 |
| 49 | 1010 0111 | 1350.63 | 1375.3 | -4.7 | 1.3 | 15.4 | 1374.9 | 0.4 |
| 50 | 1010 0110 | 1366.25 | 1386.0 | 0.0 | 0.6 | 10.7 | 1390.7 | -9.8 |
| 51 | 1010 0101 | 1381.88 | 1411.0 | -1.2 | 1.2 | 25.0 | 1406.6 | 4.4 |
| 52 | 1010 0100 | 1397.50 | 1429.3 | -1.1 | 1.1 | 18.3 | 1422.5 | 6.8 |
| 53 | 1010 0011 | 1413.13 | 1441.0 | -4.4 | 0.0 | 11.7 | 1438.3 | 2.7 |
| 54 | 1010 0010 | 1428.25 | 1454.0 | 0.6 | 0.5 | 13.0 | 1454.2 | -0.2 |
| 55 | 1010 0001 | 1444.88 | 1477.2 | -1.3 | 0.0 | 23.2 | 1470.1 | 7.1 |
| 56 | 1010 0000 | 1460.00 | 1486.3 | -0.4 | 0.4 | 9.1 | 1485.9 | 0.3 |
| 57 | 1001 1111 | 1475.63 | 1502.4 | 6.7 | 1.3 | 15.1 | 1501.8 | 0.6 |
| 58 | 1001 1110 | 1491.25 | 1509.9 | 0.6 | 0.6 | 7.6 | 1512.7 | -7.7 |
| 59 | 1001 1101 | 1506.88 | 1535.8 | 1.1 | 1.2 | 25.9 | 1533.5 | 2.3 |
| 60 | 1001 1100 | 1522.50 | 1550.2 | -1.5 | -0.1 | 14.1 | 1549.4 | 0.8 |
| 61 | 1001 1011 | 1538.13 | 1568.5 | -1.2 | 1.2 | 18.3 | 1565.3 | 3.2 |
| 62 | 1001 1010 | 1553.25 | 1579.8 | -1.5 | 0.0 | 11.3 | 1581.1 | -1.3 |
| 63 | 1001 1001 | 1569.88 | 1601.6 | 1.3 | 1.3 | 21.8 | 1592.0 | 4.6 |
| 64 | 1001 1000 | 1585.00 | 1602.1 | -0.0 | 1.1 | 5.5 | 1612.9 | -5.8 |

ORIGINAL PAGE IS
OF POOR QUALITY

HAC
11/5/71
121

DEC 01 '81

ORIGINAL PAGE 18
OF 100: QUALITY

HAO
TEST
5-7

DEC 01 78

ORIGINAL PAGE IS
OF POOR QUALITY

| DESIGNATED
NUMBER | OLD
THRESHOLD | NEW
THRESHOLD | ANALOG
INTEGRATED
THRESHOLD | INTEGRATED
THRESHOLD | DIFFERENCE | DIFFERENCE | DIFFERENCE | DIFFERENCE | DIFFERENCE |
|----------------------|------------------|------------------|-----------------------------------|-------------------------|------------|------------|------------|------------|------------|
| 158 | 0110 | 0010 | 2428.25 | 2466.7 | 0.9 | 0.1 | 19.0 | 2469.7 | -3.0 |
| 159 | 0110 | 0001 | 2494.00 | 2483.6 | 1.4 | 1.4 | 21.9 | 2485.5 | 3.0 |
| 160 | 0110 | 0000 | 2460.00 | 2496.5 | -0.0 | 0.8 | 8.0 | 2501.4 | -4.9 |
| 161 | 0101 | 1111 | 2475.63 | 2511.5 | -1.3 | 1.3 | 15.0 | 2517.3 | -5.2 |
| 162 | 0101 | 1110 | 2591.25 | 2523.4 | 0.8 | 0.7 | 11.9 | 2531.1 | 9.7 |
| 163 | 0101 | 1101 | 2508.88 | 2548.8 | 0.6 | 0.7 | 25.3 | 2549.0 | 0.2 |
| 164 | 0101 | 1100 | 2522.50 | 2562.6 | -6.7 | 1.2 | 13.8 | 2564.9 | -2.3 |
| 165 | 0101 | 1011 | 2538.13 | 2578.0 | -1.1 | 3.1 | 15.4 | 2580.7 | -2.7 |
| 166 | 0101 | 1010 | 2573.25 | 2594.1 | -1.3 | -1.3 | 16.1 | 2596.6 | 2.5 |
| 167 | 0101 | 1001 | 2579.00 | 2616.0 | -6.1 | 1.3 | 21.9 | 2612.5 | 3.6 |
| 168 | 0101 | 1000 | 2585.00 | 2619.5 | 1.6 | 1.0 | 3.3 | 2628.3 | -9.1 |
| 169 | 0101 | 0111 | 2588.53 | 2640.5 | 1.9 | 1.8 | 21.2 | 2634.2 | -3.2 |
| 170 | 0101 | 0110 | 2615.25 | 2651.8 | -0.8 | -0.8 | 11.3 | 2660.0 | -8.3 |
| 171 | 0101 | 0101 | 2621.88 | 2676.2 | -1.2 | 1.2 | 24.4 | 2675.9 | 0.3 |
| 172 | 0101 | 0100 | 2642.50 | 2691.4 | 1.0 | 0.6 | 15.1 | 2691.8 | -0.4 |
| 173 | 0101 | 0011 | 2663.13 | 2703.9 | 2.7 | 1.2 | 12.5 | 2707.6 | -3.7 |
| 174 | 0101 | 0010 | 2678.25 | 2719.1 | -6.0 | 0.3 | 15.2 | 2723.5 | 4.4 |
| 175 | 0101 | 0001 | 2694.00 | 2742.5 | 1.0 | 0.9 | 23.5 | 2739.4 | 3.2 |
| 176 | 0101 | 0000 | 2710.00 | 2755.8 | -0.9 | -1.6 | 13.2 | 2755.2 | 0.5 |
| 177 | 0100 | 1111 | 2725.53 | 2763.4 | 1.1 | 1.1 | 7.6 | 2771.1 | -7.2 |
| 178 | 0100 | 1110 | 2741.25 | 2775.8 | 0.8 | 0.7 | 12.4 | 2787.0 | -11.2 |
| 179 | 0100 | 1101 | 2755.88 | 2802.5 | -1.3 | 0.1 | 26.6 | 2802.8 | -0.4 |
| 180 | 0100 | 1100 | 2772.50 | 2820.0 | -1.2 | 1.2 | 12.5 | 2818.7 | 1.3 |
| 181 | 0100 | 1011 | 2788.13 | 2831.2 | -3.5 | 1.1 | 11.1 | 2834.6 | -3.4 |
| 182 | 0100 | 1010 | 2803.25 | 2842.0 | 1.1 | 1.3 | 15.8 | 2840.4 | 3.4 |
| 183 | 0100 | 1001 | 2819.00 | 2857.7 | 0.0 | 1.2 | 20.7 | 2866.3 | 1.4 |

HP 414C DIGITAL MULTIMETER UNIT TEST MODEL 414C 1/20 1 1700 319

1901/1/201 11:09:39 POINT BY TEST EQUI PROLOG SOURCE 0000000000000000

TEST POINT 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



| TEST POINT NUMBER | ANALOG TEST POINT | ANALOG TEST POINT | ANALOG TEST POINT | ANALOG TEST POINT | ANALOG TEST POINT | ANALOG TEST POINT | TEST POINT STRAIGHT LINE | |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------------|-----------|
| | | | | | | | POINT | DEVIATION |
| 114 | 0100 1000 | 2801.00 | 2801.7 | -0.7 | -0.8 | 14.0 | 2802.7 | -0.7 |
| 115 | 0100 0111 | 2800.63 | 2801.8 | -1.0 | -1.1 | 10.1 | 2808.0 | -7.4 |
| 116 | 0100 0110 | 2800.27 | 2809.0 | 1.0 | 0.2 | 12.2 | 2913.9 | -9.9 |
| 117 | 0100 0101 | 2801.88 | 2929.2 | 1.2 | 1.3 | 24.1 | 2929.8 | -1.6 |
| 118 | 0100 0100 | 2927.50 | 2940.4 | 0.1 | 1.2 | 20.2 | 2945.6 | 2.7 |
| 119 | 0100 0011 | 2913.13 | 2928.0 | -0.2 | -0.7 | 5.6 | 2961.5 | -7.6 |
| 120 | 0100 0010 | 2903.75 | 2923.3 | 0.0 | 0.7 | 19.1 | 2927.4 | -4.1 |
| 121 | 0100 0001 | 2944.08 | 2994.9 | 1.1 | 1.3 | 21.6 | 2993.2 | 1.6 |
| 122 | 0100 0000 | 2950.00 | 3002.1 | 1.2 | 1.2 | 2.1 | 3009.1 | -7.0 |
| 123 | 0011 1111 | 2925.63 | 3018.6 | -1.6 | -0.2 | 16.4 | 3025.0 | -6.4 |
| 124 | 0011 1110 | 2991.27 | 3010.5 | -0.6 | 0.6 | 11.9 | 3040.8 | -10.4 |
| 125 | 0011 1101 | 3006.88 | 3057.2 | 0.1 | -1.3 | 26.8 | 3056.7 | 0.5 |
| 126 | 0011 1100 | 3002.50 | 3052.1 | -5.2 | 1.4 | 11.9 | 3072.6 | -4.4 |
| 127 | 0011 1011 | 3008.13 | 3084.2 | -1.1 | 1.1 | 15.1 | 3088.4 | -4.2 |
| 128 | 0011 1010 | 3073.75 | 3101.6 | -0.0 | -0.0 | 17.4 | 3104.3 | -2.7 |
| 129 | 0011 1001 | 3069.08 | 3124.1 | -1.3 | -1.3 | 22.4 | 3120.2 | 1.9 |
| 130 | 0011 1000 | 3085.00 | 3126.2 | 1.1 | 0.0 | 2.5 | 3136.0 | -9.4 |
| 131 | 0011 0111 | 3100.63 | 3145.2 | 1.1 | 1.1 | 11.1 | 3151.9 | -6.8 |
| 132 | 0011 0110 | 3116.27 | 3158.8 | 0.1 | 0.8 | 13.2 | 3162.8 | -8.2 |
| 133 | 0011 0101 | 3131.88 | 3185.0 | -1.4 | -1.3 | 22.1 | 3183.6 | 1.3 |
| 134 | 0011 0100 | 3147.50 | 3200.0 | -0.1 | -1.1 | 15.1 | 3199.5 | 0.5 |
| 135 | 0011 0011 | 3163.13 | 3217.1 | -0.0 | 1.2 | 11.1 | 3215.4 | -3.2 |
| 136 | 0011 0010 | 3178.75 | 3231.2 | 1.4 | 1.1 | 19.2 | 3231.2 | 0.1 |
| 137 | 0011 0001 | 3194.08 | 3252.0 | -1.3 | -0.0 | 26.2 | 3242.1 | 4.9 |
| 138 | 0011 0000 | 3210.00 | 3264.5 | -1.2 | -1.9 | 1.4 | 3263.0 | 1.5 |
| 202 | 0010 1111 | 3275.63 | 3324.3 | 0.0 | -1.0 | 8.8 | 3328.8 | -4.5 |

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OF POOR QUALITY

PS-35 ANALOGIC METER BOX UNIT TEST MODEL 1.111.87N.3 PAGE 340

0901.2201 11:04:39 TUNING TEST FOR FREQUENCY ADJUSTMENT TEMP.

0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000 0.000000



11-01-81

| MEASURED AND OBSERVED
FREQUENCY | OBSERVED
FREQUENCY | OBSERVED
FREQUENCY | OBSERVED
FREQUENCY | ANALOG INPUT OUTPUT | | OBSERVED
FREQUENCY | OBSERVED
FREQUENCY | BEST FIT STRAIGHT LINE | |
|------------------------------------|-----------------------|-----------------------|-----------------------|---------------------|-------|-----------------------|-----------------------|------------------------|-----------|
| | | | | NOMINAL | LOWER | | | POINT | DEVIATION |
| 210 | 0010 | 1110 | 3294.25 | 3294.8 | 0.5 | 0.4 | 11.5 | 3294.7 | -9.9 |
| 211 | 0010 | 1101 | 3294.888 | 3311.1 | -0.2 | 1.2 | 18.3 | 3310.6 | 0.5 |
| 212 | 0010 | 1100 | 3294.50 | 3328.9 | -1.5 | 1.6 | 12.8 | 3324.4 | 2.5 |
| 213 | 0010 | 1099 | 3298.13 | 3340.5 | -1.1 | 1.1 | 11.6 | 3342.3 | -1.8 |
| 214 | 0010 | 1098 | 3301.25 | 3356.3 | 1.3 | 0.1 | 11.8 | 3358.2 | 1.9 |
| 215 | 0010 | 1001 | 3319.88 | 3377.9 | 1.3 | 1.5 | 21.6 | 3374.0 | 3.8 |
| 216 | 0010 | 1000 | 3335.00 | 3389.6 | -0.1 | 1.1 | 11.7 | 3389.9 | -0.3 |
| 217 | 0010 | 0111 | 3350.53 | 3401.0 | -1.3 | 1.2 | 11.2 | 3401.8 | -3.0 |
| 218 | 0010 | 0110 | 3355.25 | 3415.1 | 0.1 | -0.8 | 11.1 | 3421.6 | -6.5 |
| 219 | 0010 | 0101 | 3361.888 | 3439.1 | 1.3 | 1.2 | 24.0 | 3437.5 | 1.6 |
| 220 | 0010 | 0100 | 3392.50 | 3458.2 | 1.0 | 1.2 | 19.1 | 3451.4 | 4.9 |
| 221 | 0010 | 0011 | 3413.13 | 3459.0 | -1.2 | 3.7 | 10.7 | 3459.2 | -0.3 |
| 222 | 0010 | 0010 | 3428.25 | 3480.8 | -1.1 | -1.0 | 19.9 | 3485.1 | 3.7 |
| 223 | 0010 | 0001 | 3444.38 | 3507.8 | -0.1 | -1.3 | 19.0 | 3501.0 | 6.9 |
| 224 | 0010 | 0000 | 3450.00 | 3517.3 | 0.7 | 0.8 | 9.2 | 3516.8 | 0.9 |
| | | | | | | | | | |
| 225 | 0001 | 1111 | 3475.63 | 3527.7 | -0.1 | 1.2 | 9.9 | 3532.7 | -1.0 |
| 226 | 0001 | 1110 | 3491.25 | 3540.9 | -0.7 | -0.8 | 13.2 | 3543.6 | -7.7 |
| 227 | 0001 | 1101 | 3506.888 | 3569.5 | -1.4 | 1.5 | 23.6 | 3564.4 | 1.1 |
| 228 | 0001 | 1100 | 3522.50 | 3580.8 | -7.1 | 0.4 | 11.2 | 3580.3 | 0.5 |
| 229 | 0001 | 1011 | 3538.13 | 3595.1 | -1.2 | 1.3 | 14.3 | 3596.2 | -1.1 |
| 230 | 0001 | 1010 | 3553.25 | 3612.4 | -1.5 | 0.6 | 12.3 | 3612.0 | 0.4 |
| 231 | 0001 | 1001 | 3569.888 | 3635.5 | -1.4 | 1.5 | 23.0 | 3627.9 | 7.6 |
| 232 | 0001 | 1000 | 3585.00 | 3639.2 | 0.1 | -1.0 | 3.7 | 3641.8 | -4.6 |
| 233 | 0001 | 0111 | 3500.53 | 3656.8 | 1.1 | 1.1 | 12.6 | 3659.6 | -2.8 |
| 234 | 0001 | 0110 | 3615.25 | 3670.2 | 0.1 | 0.9 | 13.4 | 3675.5 | -5.3 |
| 235 | 0001 | 0101 | 3631.888 | 3696.9 | -1.4 | 0.6 | 26.7 | 3691.4 | 5.6 |
| 236 | 0001 | 0100 | 3647.50 | 3712.9 | -1.2 | -1.2 | 16.0 | 3707.2 | 5.7 |

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[illegible]

HAC
TEST
10/1

DEC 01 '81

| THRESHOLD
NUMBER | A/D
THRESHOLD | OUTPUT
THRESHOLD | DIGITAL
VALUE
(mV) | ANALOG
INPUT
NOMINAL | INPUT VOL TAGE
LEVELS
LOWER | (mV)
1 : 1
UPPER | INCR ASSE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT | DEVIATION |
|---------------------|------------------|---------------------|--------------------------|----------------------------|-----------------------------------|------------------------|-------------------------------------|---------------------------------|-----------|
| 52 | 1100 | 1100 | 772.500 | 790.9 | -1.2 | -1.2 | 15.7 | 785.1 | 5.8 |
| 53 | 1100 | 1011 | 788.125 | 799.3 | 1.3 | -0.1 | 8.4 | 800.9 | -1.7 |
| 54 | 1100 | 1010 | 803.250 | 816.5 | 1.2 | 1.2 | 17.1 | 816.8 | -0.2 |
| 55 | 1100 | 1001 | 819.375 | 839.4 | -0.0 | 1.3 | 22.9 | 837.6 | 6.8 |
| 56 | 1100 | 1000 | 835.000 | 851.8 | -1.2 | -1.2 | 12.3 | 849.5 | 3.3 |
| 57 | 1100 | 0111 | 850.625 | 866.9 | -1.3 | -1.3 | 15.1 | 864.3 | 2.6 |
| 58 | 1100 | 0110 | 865.250 | 876.8 | 1.2 | 1.1 | 9.9 | 880.2 | -3.4 |
| 59 | 1100 | 0101 | 881.875 | 900.3 | 1.2 | 1.2 | 23.5 | 895.0 | 4.3 |
| 60 | 1100 | 0100 | 897.500 | 920.1 | -1.2 | -0.0 | 19.8 | 911.8 | 8.3 |
| 61 | 1100 | 0011 | 913.125 | 926.9 | -1.3 | -1.2 | 6.8 | 927.7 | -0.8 |
| 62 | 1100 | 0010 | 928.250 | 945.7 | -0.0 | -1.2 | 18.8 | 943.5 | 2.2 |
| 63 | 1100 | 0001 | 944.375 | 965.7 | 1.3 | 1.3 | 20.0 | 959.4 | 6.3 |
| 64 | 1100 | 0000 | 959.000 | 978.8 | 1.0 | 1.1 | 13.1 | 975.2 | 3.6 |
| 65 | 1011 | 1111 | 975.625 | 994.9 | -1.2 | -1.3 | 16.1 | 991.1 | 3.8 |
| 66 | 1011 | 1110 | 991.250 | 1003.0 | -1.3 | -1.3 | 8.1 | 1006.9 | -3.9 |
| 67 | 1011 | 1101 | 1006.88 | 1028.6 | 1.3 | -0.0 | 25.5 | 1022.8 | 5.8 |
| 68 | 1011 | 1100 | 1022.50 | 1040.5 | 1.2 | 1.2 | 11.9 | 1038.6 | 1.9 |
| 69 | 1011 | 1011 | 1038.13 | 1053.2 | 0.0 | 1.6 | 12.7 | 1054.5 | -1.3 |
| 70 | 1011 | 1010 | 1053.75 | 1070.9 | 0.9 | 0.9 | 17.7 | 1070.3 | 0.6 |
| 71 | 1011 | 1001 | 1069.38 | 1095.0 | -1.2 | 1.2 | 24.1 | 1086.1 | 8.9 |
| 72 | 1011 | 1000 | 1084.00 | 1098.3 | 1.2 | 1.2 | 3.2 | 1102.0 | -3.7 |
| 73 | 1011 | 0111 | 1100.63 | 1114.1 | 1.1 | 1.2 | 15.8 | 1117.8 | -3.8 |
| 74 | 1011 | 0110 | 1116.25 | 1131.2 | -1.2 | -0.0 | 17.1 | 1133.7 | -2.5 |
| 75 | 1011 | 0101 | 1131.88 | 1156.4 | -1.3 | -1.3 | 25.3 | 1149.5 | 6.9 |
| 76 | 1011 | 0100 | 1147.50 | 1170.5 | -0.1 | -1.4 | 14.1 | 1165.4 | 5.2 |
| 77 | 1011 | 0011 | 1163.13 | 1179.5 | 1.2 | 1.3 | 9.0 | 1181.2 | -1.7 |
| 78 | 1011 | 0010 | 1178.75 | 1198.1 | 1.1 | 1.2 | 18.6 | 1197.1 | 1.1 |

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OF POOR QUALITY

TP 236 AUTOMATIC MASTER MIX UNIT TEST MODEL 1111 5/2/66 PAGE 347

1981/12/01 11:11:11 FUNCTION TEST UNIT PERFORMANCE @ AMBIENT TEMP.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



DEL 01/88

| TEST SHOULD AND OUTPUT
NUMBER TEST SHOULD | TOTAL
VOLUME
(GV) | ANALOG INPUT VOLTAGE (GV) | | | INCREASE
FROM PREV
TEST SHOULD | BEST FIT STRAIGHT LINE | |
|--|-------------------------|---------------------------|--------|-------|--------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1624.9 | -5.2 | 1.3 | 1624.9 | 0.0 |
| 106 | 1001 0110 | 1616.25 | 1634.4 | 1.2 | 1.2 | 1640.7 | 6.4 |
| 107 | 1001 0101 | 1631.88 | 1661.2 | -1.3 | -1.4 | 1656.6 | 4.6 |
| 108 | 1001 0100 | 1647.50 | 1675.5 | -1.2 | -1.1 | 1672.4 | 3.1 |
| 109 | 1001 0011 | 1663.13 | 1690.1 | -4.3 | 0.0 | 1680.3 | 1.9 |
| 110 | 1001 0010 | 1678.75 | 1701.9 | 1.5 | 1.5 | 1704.1 | -2.2 |
| 111 | 1001 0001 | 1694.38 | 1724.7 | 0.0 | 1.2 | 1720.0 | 4.0 |
| 112 | 1001 0000 | 1710.00 | 1740.3 | -1.2 | 1.2 | 1735.8 | 5.0 |
| 113 | 1000 1111 | 1725.63 | 1745.3 | -1.2 | 5.5 | 1751.6 | -6.3 |
| 114 | 1000 1110 | 1741.25 | 1768.9 | 1.2 | 1.1 | 1767.5 | -0.6 |
| 115 | 1000 1101 | 1756.88 | 1785.7 | 1.3 | 1.2 | 1783.3 | 2.4 |
| 116 | 1000 1100 | 1772.50 | 1801.8 | -1.2 | 0.1 | 1799.2 | 2.7 |
| 117 | 1000 1011 | 1788.13 | 1817.5 | -1.3 | -1.3 | 1815.0 | 2.4 |
| 118 | 1000 1010 | 1803.75 | 1827.7 | 0.0 | -1.2 | 1830.9 | -3.2 |
| 119 | 1000 1001 | 1819.38 | 1850.9 | 1.3 | 1.2 | 1846.7 | 4.2 |
| 120 | 1000 1000 | 1835.00 | 1857.9 | 1.1 | 1.2 | 1852.6 | 1.4 |
| 121 | 1000 0111 | 1850.63 | 1878.4 | -1.3 | -1.3 | 1878.4 | -0.0 |
| 122 | 1000 0110 | 1866.25 | 1897.9 | -1.2 | -1.3 | 1894.1 | -6.3 |
| 123 | 1000 0101 | 1881.88 | 1911.6 | 1.7 | -0.0 | 1910.1 | 1.5 |
| 124 | 1000 0100 | 1897.50 | 1910.1 | 1.2 | 1.2 | 1925.9 | 4.2 |
| 125 | 1000 0011 | 1913.13 | 1942.1 | -1.5 | 1.3 | 1941.3 | 0.3 |
| 126 | 1000 0010 | 1928.75 | 1971.8 | -1.2 | -1.2 | 1967.6 | -1.3 |
| 127 | 1000 0001 | 1944.38 | 1973.4 | -1.2 | 1.2 | 1973.5 | 5.0 |
| 128 | 1000 0000 | 1960.00 | 1983.3 | 1.1 | 1.1 | 1989.3 | -6.1 |
| 129 | 0111 1111 | 1975.63 | 2000.0 | 1.2 | 1.2 | 2005.7 | -5.2 |
| 130 | 0111 1110 | 1991.25 | 2014.2 | -1.1 | 0.0 | 2021.0 | -6.9 |

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OF POOR QUALITY

1951212701 11211111 PENALTY TEST FIRST PERFORMANCE OF QUALITY TEST
 1951212701 11211111 PENALTY TEST FIRST PERFORMANCE OF QUALITY TEST

IAC
 TEST
 27

| TEST POINT AND QUALITY NUMBER | | TEST VALUE | ANALOG TEST UNIT TEST POINTS RECEIVED | DIFFERENCE | DIFFERENCE FROM TEST POINTS RECEIVED | TEST POINT STRAIGHT LINE | DEVIATION |
|-------------------------------|-----------|------------|---------------------------------------|------------|--------------------------------------|--------------------------|-----------|
| NUMBER | | VALUE | ORIGINAL | LOWER | DIFFER | TEST POINT | DEVIATION |
| 131 | 0111 1101 | 2006.88 | 2041.2 | -1.3 | 1.3 | 2036.9 | 4.4 |
| 132 | 0111 1100 | 2022.50 | 2050.2 | -0.1 | 1.3 | 2032.7 | -2.0 |
| 133 | 0111 1011 | 2038.13 | 2063.2 | 1.2 | 1.2 | 2068.5 | -0.3 |
| 134 | 0111 1010 | 2054.75 | 2081.6 | -1.4 | -1.3 | 2084.4 | 0.3 |
| 135 | 0111 1001 | 2069.38 | 2106.4 | -1.3 | 1.2 | 2100.2 | 6.2 |
| 136 | 0111 1000 | 2085.50 | 2109.3 | -1.0 | 1.1 | 2116.1 | -6.8 |
| 137 | 0111 0111 | 2100.63 | 2125.9 | -1.1 | 0.0 | 2131.9 | -5.1 |
| 138 | 0111 0110 | 2116.25 | 2141.1 | 1.2 | 1.2 | 2147.8 | -6.7 |
| 139 | 0111 0101 | 2131.88 | 2166.5 | 0.1 | 0.7 | 2163.6 | 2.8 |
| 140 | 0111 0100 | 2147.50 | 2181.5 | -1.1 | 1.2 | 2179.5 | 2.0 |
| 141 | 0111 0011 | 2163.13 | 2190.8 | -1.3 | 1.2 | 2191.3 | -4.5 |
| 142 | 0111 0010 | 2178.75 | 2209.5 | 1.3 | 1.3 | 2211.2 | -1.5 |
| 143 | 0111 0001 | 2194.38 | 2231.6 | 1.3 | 1.3 | 2227.0 | 4.6 |
| 144 | 0111 0000 | 2210.00 | 2241.9 | -1.0 | 0.2 | 2242.8 | -0.8 |
| 145 | 0110 1111 | 2225.53 | 2253.9 | -1.2 | -1.2 | 2258.7 | -4.8 |
| 146 | 0110 1110 | 2241.25 | 2257.0 | 0.1 | -1.3 | 2274.5 | 7.5 |
| 147 | 0110 1101 | 2256.88 | 2292.7 | 1.3 | 1.2 | 2290.4 | 2.3 |
| 148 | 0110 1100 | 2272.50 | 2308.1 | -0.4 | 1.2 | 2306.2 | 1.8 |
| 149 | 0110 1011 | 2288.13 | 2317.1 | -1.2 | -1.3 | 2322.1 | -5.0 |
| 150 | 0110 1010 | 2303.75 | 2335.0 | -1.2 | 1.9 | 2337.9 | 2.9 |
| 151 | 0110 1001 | 2319.38 | 2357.9 | 1.2 | -0.2 | 2353.1 | 4.2 |
| 152 | 0110 1000 | 2335.00 | 2368.5 | 1.2 | 1.2 | 2359.6 | -1.1 |
| 153 | 0110 0111 | 2350.63 | 2379.6 | -2.5 | 1.3 | 2385.5 | -5.9 |
| 154 | 0110 0110 | 2366.25 | 2395.1 | -1.1 | 1.3 | 2401.3 | -6.2 |
| 155 | 0110 0101 | 2381.88 | 2419.8 | -0.8 | -1.3 | 2417.1 | 2.6 |
| 156 | 0110 0100 | 2397.50 | 2437.1 | 1.1 | 1.2 | 2433.0 | 4.1 |
| 157 | 0110 0011 | 2413.13 | 2442.0 | 1.3 | 1.2 | 2448.8 | 6.8 |

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 OF POOR QUALITY

5-276 HYDRAULIC PUMP/TEST UNIT TEST MODEL 1111, S/N 3 PAGE 302

981111-01 11211111 PRESSURE TEST UNIT PROPORTIONED TO AMBIENT TEMP.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



000100

| REGISTERED
NUMBER | OLD UNIT
THIRD SUBD | NEW
UNIT | ANALOG
VOLTAGE
VOLT | INPUT
RATIO
NOMINAL | DIFFERENCE
FOUR | INCREASE
1:1
DIFFER | INCREASE
THIRD SUBD | BEST FIT STRAIGHT LINE | |
|----------------------|------------------------|-------------|---------------------------|---------------------------|--------------------|---------------------------|------------------------|------------------------|-----------|
| | | | | | | | | POINT | DEVIATION |
| 233 | 0001 | 0011 | 3261.12 | 3217.3 | -2.6 | 1.3 | 11.9 | 3216.5 | 0.9 |
| 233 | 0001 | 0010 | 3261.25 | 3219.0 | -1.4 | 1.3 | 16.7 | 3232.3 | 1.7 |
| 239 | 0001 | 0001 | 3294.03 | 3218.4 | 0.4 | 1.1 | 24.4 | 3248.1 | 10.3 |
| 246 | 0001 | 0000 | 3210.00 | 3222.2 | 1.1 | 1.2 | 19.1 | 3264.0 | 8.7 |
| 241 | 0000 | 1111 | 3211.63 | 3277.6 | 1.2 | 1.1 | 4.9 | 3279.8 | -2.2 |
| 241 | 0000 | 1110 | 3211.25 | 3291.9 | -0.5 | 0.2 | 14.1 | 3295.2 | -3.7 |
| 243 | 0000 | 1101 | 3256.388 | 3320.3 | 1.5 | 1.3 | 13.3 | 3311.5 | 11.8 |
| 245 | 0000 | 1100 | 3222.50 | 3316.3 | -2.6 | 1.2 | 16.0 | 3317.4 | 9.0 |
| 247 | 0000 | 1011 | 3301.15 | 3341.3 | -1.2 | 1.2 | 9.8 | 3343.2 | 2.1 |
| 248 | 0000 | 1010 | 3301.25 | 3319.5 | 1.1 | 1.2 | 14.1 | 3319.1 | 0.4 |
| 247 | 0000 | 1001 | 3319.30 | 3332.8 | 1.6 | 1.4 | 28.3 | 3314.9 | 12.9 |
| 253 | 0000 | 1000 | 3319.00 | 3320.1 | -1.2 | 1.3 | 12.1 | 3320.8 | 9.4 |
| 249 | 0000 | 0111 | 3316.65 | 3306.9 | 1.3 | -0.0 | 8.2 | 3306.6 | 0.3 |
| 250 | 0000 | 0110 | 3356.25 | 3321.5 | 1.2 | 1.3 | 13.2 | 3322.4 | -1.4 |
| 253 | 0000 | 0101 | 3311.500 | 3348.1 | -0.2 | 1.3 | 27.0 | 3338.1 | 9.8 |
| 257 | 0000 | 0100 | 3322.500 | 3353.0 | -1.2 | 1.2 | 19.9 | 3324.1 | 13.9 |
| 251 | 0000 | 0011 | 3313.13 | 3326.0 | -1.4 | -1.2 | 8.0 | 3320.0 | 8.0 |
| 254 | 0000 | 0010 | 3324.25 | 3320.4 | 1.1 | 1.3 | 14.5 | 3318.8 | 4.6 |
| 257 | 0000 | 0001 | 3324.333 | 3311.4 | 1.2 | 1.4 | 24.9 | 3301.7 | 11.7 |

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OF POOR QUALITY

11/27/01 11:17:47 TERNARY TEST UNIT PERFORMANCE @ AMBIENT TEMP.

11/27/01 11:17:47 TERNARY TEST UNIT PERFORMANCE @ AMBIENT TEMP.

11/27/01 11:17:47 TERNARY TEST UNIT PERFORMANCE @ AMBIENT TEMP.



| THRESHOLD A/D OUTPUT | | IDEAL VALUE (MV) | ANALOG INPUT VOLTAGE (MV) | | INCREASE FROM PREV THRESHOLD | BEST FIT STRAIGHT LINE | |
|----------------------|-----------|------------------|---------------------------|-------|------------------------------|------------------------|------------|
| ADDRESS | THRESHOLD | | NOMINAL | LOWER | | POINT | DEVIATION |
| 15 | 1110 0110 | 366.250 | 373.8 | -2.6 | -2.7 | 13.4 | 377.8 -4.0 |
| 27 | 1110 0101 | 381.875 | 397.9 | -2.6 | -2.6 | 24.1 | 393.7 4.2 |
| 28 | 1110 0100 | 397.500 | 414.0 | -2.6 | -2.6 | 16.1 | 409.6 4.5 |
| 29 | 1110 0011 | 413.125 | 420.9 | -2.5 | -2.7 | 6.9 | 425.5 -4.6 |
| 30 | 1110 0010 | 428.750 | 442.7 | -2.7 | -0.0 | 21.8 | 441.4 1.4 |
| 31 | 1110 0001 | 444.375 | 464.4 | -2.6 | -2.6 | 21.7 | 467.2 7.2 |
| 32 | 1110 0000 | 460.000 | 469.9 | -0.0 | -3.5 | 5.5 | 473.1 -3.2 |
| 33 | 1101 1111 | 475.625 | 488.3 | -3.0 | -2.6 | 18.4 | 489.0 -0.7 |
| 34 | 1101 1110 | 491.250 | 496.7 | -2.6 | -2.6 | 8.4 | 504.9 -8.7 |
| 35 | 1101 1101 | 506.875 | 525.6 | -2.7 | -2.7 | 23.9 | 520.8 4.8 |
| 36 | 1101 1100 | 522.500 | 539.6 | -2.6 | -2.6 | 13.9 | 536.7 2.9 |
| 37 | 1101 1011 | 538.125 | 554.6 | -3.3 | 0.0 | 15.0 | 552.6 2.0 |
| 38 | 1101 1010 | 553.750 | 565.8 | -2.5 | -2.6 | 11.2 | 568.5 -2.7 |
| 39 | 1101 1001 | 569.375 | 589.6 | -0.1 | -2.5 | 23.8 | 584.4 5.2 |
| 30 | 1101 1000 | 585.000 | 598.6 | -2.8 | -2.9 | 9.0 | 600.2 -1.2 |
| 41 | 1101 0111 | 600.625 | 618.8 | -2.6 | -2.6 | 20.2 | 616.1 2.7 |
| 42 | 1101 0110 | 616.250 | 626.4 | -2.6 | -2.6 | 7.6 | 632.0 -5.6 |
| 43 | 1101 0101 | 631.875 | 651.0 | -2.5 | -2.6 | 24.6 | 647.9 3.1 |
| 44 | 1101 0100 | 647.500 | 669.7 | -2.5 | 0.1 | 18.7 | 663.8 5.9 |
| 45 | 1101 0011 | 663.125 | 679.1 | -2.6 | -3.3 | 9.3 | 679.7 -0.6 |
| 46 | 1101 0010 | 678.750 | 697.9 | -0.0 | -2.9 | 18.9 | 695.6 2.3 |
| 47 | 1101 0001 | 694.375 | 717.2 | -2.6 | -2.6 | 19.3 | 711.5 5.7 |
| 48 | 1101 0000 | 710.000 | 730.6 | 0.1 | -2.3 | 13.4 | 727.4 3.2 |
| 49 | 1100 1111 | 725.625 | 746.1 | -2.6 | -2.6 | 15.5 | 743.3 2.8 |
| 50 | 1100 1110 | 741.250 | 754.7 | -2.6 | -2.6 | 8.7 | 759.1 4.4 |
| 51 | 1100 1101 | 756.875 | 778.0 | -2.6 | -0.0 | 13.2 | 775.0 2.9 |

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1981 JAN 12 11:12:12 TEMPERATURE TEST FOR PERFORMANCE OF ADJUTANT GENERAL
 1981 JAN 12 11:12:12 TEMPERATURE TEST FOR PERFORMANCE OF ADJUTANT GENERAL

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 1151
 527

| TEST NUMBER | ADJUTANT | THRESHOLD | TEST | ANALOG | INPUT VOLTAGE (MO) | | INCREASE FROM PREVIOUS THRESHOLD | BEST FIT STRAIGHT LINE | |
|-------------|----------|-----------|---------|--------|--------------------|-------|----------------------------------|------------------------|-----------|
| | | | | | LEVELS | RATIO | | POINT | DEVIATION |
| 101 | 1001 | 0111 | 1600.63 | 1634.8 | -2.7 | -2.7 | 24.1 | 1633.1 | 1.8 |
| 102 | 1001 | 0110 | 1616.25 | 1643.7 | -2.6 | 2.6 | 8.9 | 1649.0 | -5.2 |
| 103 | 1001 | 0101 | 1631.88 | 1666.7 | 2.6 | -0.1 | 23.0 | 1664.8 | 1.9 |
| 104 | 1001 | 0100 | 1647.50 | 1682.4 | 2.3 | 2.2 | 15.7 | 1680.7 | 1.7 |
| 105 | 1001 | 0011 | 1664.13 | 1697.7 | -6.4 | 2.6 | 15.3 | 1696.6 | 1.1 |
| 106 | 1001 | 0010 | 1678.75 | 1712.1 | 0.8 | 0.8 | 14.4 | 1712.5 | -0.4 |
| 107 | 1001 | 0001 | 1694.38 | 1735.1 | 0.0 | 2.7 | 23.0 | 1728.4 | 6.7 |
| 108 | 1001 | 0000 | 1710.00 | 1747.8 | 2.5 | 2.4 | 12.7 | 1744.1 | 3.5 |
| 109 | 1000 | 1111 | 1725.63 | 1758.4 | -3.3 | 2.8 | 10.5 | 1760.2 | -1.8 |
| 110 | 1000 | 1110 | 1741.25 | 1768.5 | -2.6 | 0.0 | 10.2 | 1776.1 | -7.5 |
| 111 | 1000 | 1101 | 1755.88 | 1795.5 | -2.7 | -2.7 | 27.0 | 1792.0 | 3.5 |
| 112 | 1000 | 1100 | 1772.50 | 1810.9 | 0.0 | -2.4 | 15.4 | 1807.8 | 3.1 |
| 113 | 1000 | 1011 | 1787.13 | 1824.1 | -3.7 | 2.7 | 13.1 | 1823.7 | 0.3 |
| 114 | 1000 | 1010 | 1803.75 | 1836.9 | -2.8 | 0.2 | 12.8 | 1839.3 | -2.8 |
| 115 | 1000 | 1001 | 1819.38 | 1861.4 | -2.7 | -2.6 | 24.5 | 1870.5 | 5.9 |
| 116 | 1000 | 1000 | 1835.00 | 1874.9 | -2.8 | -2.8 | 13.5 | 1871.9 | 3.5 |
| 117 | 1000 | 0111 | 1850.63 | 1888.0 | 2.3 | 0.0 | 10.1 | 1887.3 | -2.2 |
| 118 | 1000 | 0110 | 1866.25 | 1894.2 | 2.7 | 2.7 | 9.2 | 1903.2 | 8.9 |
| 119 | 1000 | 0101 | 1881.88 | 1919.6 | -0.2 | 2.3 | 25.4 | 1919.1 | 0.5 |
| 120 | 1000 | 0100 | 1897.50 | 1940.9 | -2.6 | 2.7 | 21.3 | 1931.0 | 5.9 |
| 121 | 1000 | 0011 | 1913.13 | 1953.1 | -6.4 | -2.7 | 12.2 | 1950.9 | 2.3 |
| 122 | 1000 | 0010 | 1928.75 | 1966.1 | 1.0 | -1.0 | 12.9 | 1966.7 | -0.7 |
| 123 | 1000 | 0001 | 1944.38 | 1981.3 | 2.6 | 2.6 | 19.2 | 1972.6 | 2.6 |
| 124 | 1000 | 0000 | 1959.00 | 2002.8 | -3.0 | -0.1 | 17.5 | 1998.5 | 4.3 |
| 125 | 0111 | 1111 | 1975.63 | 2008.9 | 0.5 | 0.5 | 6.1 | 2014.4 | -1.5 |
| 126 | 0111 | 1110 | 1991.25 | 2023.5 | 0.1 | 2.9 | 14.5 | 2030.3 | -6.8 |

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HS 2-35 THE MAGNETIC COMPUTER BOX UNIT TEST MODEL 1011 S/N 3 PAGE 367

1931/12/01 11:24:29 PENALTY TEST FULL PERFORMANCE COEFFICIENT TEST.

| THRESHOLD
NUMBER | AND OUTPUT
THRESHOLD | DIGITAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | INCREASE
FROM PREVIOUS
THRESHOLD | BEST FIT STRAIGHT LINE | | |
|---------------------|-------------------------|--------------------------|---------------------------|-------------------|--|------------------------|-----------|------|
| | | | NOMINAL | FEEDBACK
LOWER | | POINT | DEVIATION | |
| 12 | 1100 1100 | 222.500 | 232.0 | 0.8 | 0.8 | 11.0 | 286.4 | 0.6 |
| 13 | 1100 1011 | 238.125 | 801.6 | 0.7 | -0.0 | 14.5 | 802.3 | -0.7 |
| 14 | 1100 1010 | 803.250 | 818.8 | 1.3 | 1.4 | 12.2 | 818.2 | 0.6 |
| 15 | 1100 1001 | 819.375 | 842.5 | 0.7 | -0.0 | 23.7 | 834.2 | 3.3 |
| 16 | 1100 1000 | 835.000 | 855.0 | 2.4 | 2.4 | 12.5 | 850.1 | 4.9 |
| 17 | 1100 0111 | 850.625 | 863.5 | -0.0 | -0.8 | 8.4 | 866.0 | -2.5 |
| 18 | 1100 0110 | 866.250 | 879.4 | 1.5 | 1.4 | 15.9 | 881.9 | -2.6 |
| 19 | 1100 0101 | 881.875 | 902.5 | 0.9 | 0.9 | 23.1 | 897.9 | 4.6 |
| 20 | 1100 0100 | 897.500 | 922.3 | -1.0 | 0.0 | 19.8 | 911.8 | 8.5 |
| 21 | 1100 0011 | 913.125 | 929.3 | -0.6 | -0.6 | 7.0 | 929.7 | -0.4 |
| 22 | 1100 0010 | 928.750 | 947.8 | 1.3 | -0.1 | 18.5 | 945.6 | 2.2 |
| 23 | 1100 0001 | 944.375 | 969.1 | 0.6 | 0.6 | 51.2 | 961.6 | 7.5 |
| 24 | 1100 0000 | 960.000 | 981.7 | -0.0 | 1.4 | 12.6 | 977.5 | 4.5 |
| | | | | | | | | |
| 25 | 1011 1111 | 995.625 | 991.4 | -0.9 | -0.9 | 9.8 | 993.4 | -2.0 |
| 26 | 1011 1110 | 991.250 | 1006.4 | -1.3 | -1.4 | 15.0 | 1009.4 | -2.9 |
| 27 | 1011 1101 | 1006.880 | 1030.8 | 0.8 | 0.2 | 24.3 | 1025.3 | 5.5 |
| 28 | 1011 1100 | 1022.500 | 1043.7 | 1.2 | 1.3 | 12.9 | 1041.2 | 2.5 |
| 29 | 1011 1011 | 1038.125 | 1057.7 | -0.7 | 0.0 | 14.1 | 1057.1 | 0.6 |
| 30 | 1011 1010 | 1053.750 | 1076.4 | -0.9 | -0.7 | 18.7 | 1073.1 | 3.3 |
| 31 | 1011 1001 | 1069.380 | 1098.6 | 0.0 | -0.9 | 22.2 | 1089.0 | 9.6 |
| 32 | 1011 1000 | 1085.000 | 1101.5 | 1.5 | 1.5 | 2.9 | 1104.9 | -3.5 |
| 33 | 1011 0111 | 1100.625 | 1117.8 | 0.9 | 0.9 | 16.3 | 1120.8 | 3.0 |
| 34 | 1011 0110 | 1116.250 | 1135.3 | -1.4 | -1.3 | 17.5 | 1136.8 | -1.5 |
| 35 | 1011 0101 | 1131.880 | 1159.2 | -1.0 | -0.9 | 23.9 | 1152.7 | 6.5 |
| 36 | 1011 0100 | 1147.500 | 1173.1 | 1.0 | 0.1 | 13.9 | 1168.6 | 4.5 |
| 37 | 1011 0011 | 1163.125 | 1184.2 | 0.7 | 0.7 | 11.0 | 1184.6 | -0.4 |
| 38 | 1011 0010 | 1178.750 | 1202.4 | 0.0 | 1.3 | 18.2 | 1200.5 | 1.9 |

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HS-236 THERMATIC MAPPER AUX UNIT TEST MODEL 11 FLI. S/N 3 PAGE 369

1951/1/24 11:24:24 FINALLY TEST FULL PERFORMANCE PERFORMANT TIME.

11.6 TEST 527

| THRESHOLD AND OUTPUT NUMBER | THRESHOLD | THRESHOLD VALUE (MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE FROM PREV THRESHOLD | BEST FIT STRAIGHT LINE | |
|-----------------------------|-----------|----------------------|---------------------------|-------|-------|------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1624.8 | 1.0 | 1.0 | 14.9 | 1630.5 | -5.7 |
| 106 | 1001 0110 | 1616.25 | 1641.0 | 0.0 | 1.3 | 16.2 | 1646.4 | -5.4 |
| 107 | 1001 0101 | 1631.88 | 1666.2 | -0.9 | -1.0 | 25.2 | 1662.4 | 3.8 |
| 108 | 1001 0100 | 1647.50 | 1682.0 | -0.8 | -0.8 | 15.8 | 1678.3 | 4.7 |
| 109 | 1001 0011 | 1663.13 | 1691.1 | 0.8 | 0.8 | 9.1 | 1694.2 | -3.1 |
| 110 | 1001 0010 | 1678.75 | 1710.1 | 0.5 | 0.5 | 19.0 | 1710.2 | -0.1 |
| 111 | 1001 0001 | 1694.38 | 1732.9 | -0.9 | -0.0 | 22.8 | 1726.1 | 6.8 |
| 112 | 1001 0000 | 1710.00 | 1747.7 | -1.4 | -1.2 | 14.8 | 1742.0 | 5.7 |
| 113 | 1000 1111 | 1725.63 | 1752.1 | 0.1 | -1.0 | 4.4 | 1757.9 | -5.8 |
| 114 | 1000 1110 | 1741.25 | 1766.1 | 1.4 | 1.3 | 13.9 | 1773.9 | -7.8 |
| 115 | 1000 1101 | 1756.88 | 1791.5 | 0.9 | 0.9 | 25.4 | 1789.8 | 1.7 |
| 116 | 1000 1100 | 1772.50 | 1802.4 | -0.8 | -0.8 | 10.9 | 1805.7 | -3.1 |
| 117 | 1000 1011 | 1788.13 | 1818.5 | -0.9 | -0.9 | 16.1 | 1821.6 | -3.2 |
| 118 | 1000 1010 | 1803.75 | 1834.1 | 1.1 | 0.0 | 15.6 | 1837.6 | -3.5 |
| 119 | 1000 1001 | 1819.38 | 1858.2 | 0.8 | 0.8 | 24.1 | 1853.5 | 4.7 |
| 120 | 1000 1000 | 1835.00 | 1871.1 | -0.0 | 1.2 | 12.9 | 1869.4 | 1.2 |
| 121 | 1000 0111 | 1850.63 | 1879.2 | -1.1 | -1.0 | 8.1 | 1885.4 | -6.1 |
| 122 | 1000 0110 | 1866.25 | 1895.7 | -1.0 | -1.1 | 16.5 | 1901.3 | -5.5 |
| 123 | 1000 0101 | 1881.88 | 1918.6 | 0.2 | 0.8 | 22.9 | 1917.2 | 1.4 |
| 124 | 1000 0100 | 1897.50 | 1932.6 | 0.4 | 0.4 | 19.0 | 1933.1 | 4.5 |
| 125 | 1000 0011 | 1913.13 | 1945.3 | -0.2 | 0.0 | 7.2 | 1949.1 | -3.0 |
| 126 | 1000 0010 | 1928.75 | 1964.2 | -1.2 | -1.2 | 18.9 | 1965.0 | -0.8 |
| 127 | 1000 0001 | 1944.38 | 1985.9 | -0.2 | -1.8 | 21.7 | 1980.9 | 5.0 |
| 128 | 1000 0000 | 1960.00 | 1991.8 | 1.4 | 2.5 | 5.9 | 1996.8 | -5.0 |
| 129 | 0111 1111 | 1975.63 | 2008.4 | -1.3 | -1.3 | 16.5 | 2012.8 | -4.4 |
| 130 | 0111 1110 | 1991.25 | 2022.9 | -1.3 | -1.4 | 14.5 | 2028.7 | -5.8 |

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1933212701 11:24:24 PENALTY TEST FULL PERFORMANCE & ADJUST TEST.

2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



180181

| THRESHOLD
NUMBER | A/D
THRESHOLD | DIGITAL
VALUE
(NO) | ANALOG INPUT VOLTAGE (MV) | | INCREASE
FROM PRE V
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|------------------|--------------------------|---------------------------|-------|-------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | | POINT | DEVIATION |
| 210 | 0010 1110 | 3241.25 | 3296.5 | -1.9 | -2.1 | 3302.9 | -6.4 |
| 211 | 0010 1101 | 3256.88 | 3321.4 | 0.1 | -0.8 | 3318.8 | 2.6 |
| 212 | 0010 1100 | 3272.50 | 3329.0 | 0.9 | 0.9 | 3334.7 | -5.7 |
| 213 | 0010 1011 | 3288.13 | 3345.8 | 0.9 | 0.9 | 3350.7 | -4.9 |
| 214 | 0010 1010 | 3303.75 | 3364.4 | -1.5 | -1.4 | 3366.6 | -2.2 |
| 215 | 0010 1001 | 3319.38 | 3389.3 | -1.5 | -1.7 | 3382.5 | 6.8 |
| 216 | 0010 1000 | 3335.00 | 3377.7 | 2.6 | 0.0 | 3398.5 | -0.7 |
| 217 | 0010 0111 | 3350.63 | 3410.0 | 1.0 | 1.0 | 3414.4 | -4.4 |
| 218 | 0010 0110 | 3366.25 | 3424.1 | 0.1 | 1.4 | 3430.3 | -6.2 |
| 219 | 0010 0101 | 3381.88 | 3450.5 | 1.0 | -1.0 | 3446.2 | 4.3 |
| 220 | 0010 0100 | 3397.50 | 3468.4 | 0.2 | 0.1 | 3462.2 | 6.1 |
| 221 | 0010 0011 | 3413.13 | 3474.5 | 0.6 | 0.8 | 3478.1 | -3.6 |
| 222 | 0010 0010 | 3428.75 | 3493.4 | 1.2 | 1.4 | 3494.0 | -0.6 |
| 223 | 0010 0001 | 3444.38 | 3518.3 | -1.3 | -1.4 | 3509.9 | 8.3 |
| 224 | 0010 0000 | 3560.00 | 3529.2 | -1.0 | -1.0 | 3525.9 | 3.1 |
| | | | | | | | |
| 225 | 0001 1111 | 3475.63 | 3538.4 | 0.1 | -1.2 | 3541.8 | -3.4 |
| 226 | 0001 1110 | 3491.25 | 3571.3 | 1.4 | 1.5 | 3557.7 | -6.5 |
| 227 | 0001 1101 | 3506.88 | 3577.5 | 0.7 | 0.8 | 3573.7 | 3.9 |
| 228 | 0001 1100 | 3522.50 | 3592.3 | -1.2 | -1.0 | 3589.6 | 2.7 |
| 229 | 0001 1011 | 3538.13 | 3603.5 | -0.7 | -0.7 | 3605.5 | -2.0 |
| 230 | 0001 1010 | 3553.75 | 3619.9 | 1.1 | 2.3 | 3621.4 | -1.6 |
| 231 | 0001 1001 | 3569.38 | 3645.3 | 0.8 | 0.6 | 3637.4 | 7.9 |
| 232 | 0001 1000 | 3585.00 | 3649.5 | 0.4 | 1.0 | 3653.3 | -3.7 |
| 233 | 0001 0111 | 3600.63 | 3667.9 | -1.0 | -1.0 | 3669.2 | -1.3 |
| 234 | 0001 0110 | 3616.25 | 3682.3 | 1.1 | -1.2 | 3685.1 | -2.8 |
| 235 | 0001 0101 | 3631.88 | 3706.6 | 1.1 | 1.1 | 3701.1 | 5.6 |
| 236 | 0001 0100 | 3647.50 | 3722.7 | 1.2 | 1.2 | 3717.0 | 5.7 |

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THE 7000 THE ANALOG COMPUTER AUX UNIT TEST MODEL 11-11-57N-3 PAGE 328

19311-1701 1131100 1131100 1131100 1131100 1131100 1131100 1131100 1131100 1131100

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| TEST POINT | X | Y | Z | ANALOG INPUT VOLTAGE (V) | NOMINAL | TOLERANCE | INCREASE FROM PREVIOUS TEST | TEST FIT STRAIGHT LINE | |
|------------|------|------|----------|--------------------------|---------|-----------|-----------------------------|------------------------|-----------|
| | | | | | | | | POINT | DEVIATION |
| 102 | 1100 | 1100 | 222.500 | 296.6 | 0.6 | 0.6 | 16.6 | 290.9 | 5.6 |
| 103 | 1100 | 1011 | 280.125 | 807.0 | -0.7 | -0.3 | 10.4 | 806.9 | 0.1 |
| 104 | 1100 | 1010 | 807.250 | 823.8 | -1.2 | 1.3 | 16.9 | 822.8 | 1.0 |
| 105 | 1100 | 1001 | 807.375 | 846.8 | 0.2 | 0.5 | 22.9 | 838.8 | 8.0 |
| 106 | 1100 | 1000 | 837.000 | 852.9 | 0.8 | 0.8 | 11.1 | 854.7 | 3.2 |
| 107 | 1100 | 0111 | 850.625 | 867.3 | 0.1 | 0.8 | 9.4 | 870.6 | 3.3 |
| 108 | 1100 | 0110 | 866.250 | 894.4 | -1.0 | 1.1 | 27.0 | 886.6 | -2.2 |
| 109 | 1100 | 0101 | 891.875 | 908.0 | -0.8 | 0.7 | 23.6 | 902.5 | 5.4 |
| 110 | 1100 | 0100 | 892.500 | 926.8 | 0.6 | 0.1 | 18.9 | 918.5 | 8.4 |
| 111 | 1100 | 0011 | 913.125 | 933.4 | 0.5 | 0.6 | 6.5 | 934.4 | 1.0 |
| 112 | 1100 | 0010 | 928.250 | 951.2 | 0.2 | 1.0 | 18.1 | 950.4 | 1.3 |
| 113 | 1100 | 0001 | 944.375 | 974.3 | 0.7 | -0.6 | 22.6 | 966.3 | 8.0 |
| 114 | 1100 | 0000 | 960.000 | 987.9 | 0.0 | 0.9 | 13.6 | 987.2 | 0.7 |
| 115 | 1011 | 1111 | 975.625 | 1001.4 | 0.3 | 0.6 | 13.5 | 994.2 | 3.2 |
| 116 | 1011 | 1110 | 991.250 | 1009.2 | 0.9 | 0.8 | 7.8 | 1014.1 | -4.9 |
| 117 | 1011 | 1101 | 1006.383 | 1036.2 | 0.7 | 0.1 | 27.5 | 1030.1 | 6.7 |
| 118 | 1011 | 1100 | 1012.500 | 1049.6 | 0.6 | 0.6 | 12.9 | 1046.0 | 3.6 |
| 119 | 1011 | 1011 | 1030.125 | 1062.4 | 0.0 | 0.6 | 12.8 | 1061.9 | 0.4 |
| 120 | 1011 | 1010 | 1053.250 | 1077.8 | 0.7 | 0.7 | 15.4 | 1077.9 | -0.1 |
| 121 | 1011 | 1001 | 1069.383 | 1102.4 | 0.0 | 0.6 | 24.5 | 1093.8 | 8.5 |
| 122 | 1011 | 1000 | 1081.000 | 1106.4 | 0.8 | 0.9 | 4.0 | 1109.8 | 3.4 |
| 123 | 1011 | 0111 | 1100.625 | 1123.4 | -0.7 | 0.6 | 12.0 | 1125.2 | -2.3 |
| 124 | 1011 | 0110 | 1116.250 | 1138.2 | 0.8 | 0.0 | 14.8 | 1141.6 | -3.4 |
| 125 | 1011 | 0101 | 1131.383 | 1163.4 | 0.6 | 0.7 | 25.2 | 1152.6 | 10.8 |
| 126 | 1011 | 0100 | 1137.500 | 1178.5 | 0.0 | 0.6 | 15.0 | 1173.5 | 4.9 |
| 127 | 1011 | 0011 | 1163.125 | 1189.4 | -0.7 | 0.6 | 11.0 | 1189.5 | -0.0 |
| 128 | 1011 | 0010 | 1178.250 | 1202.5 | -0.0 | 0.8 | 18.1 | 1205.4 | 2.1 |

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PR 246 THMATIC MAPPER BOX UNIT TEST MODEL 1111 S/N 3 PAGE 381

1981/12/01 11:31:00 PENALTY TEST FULL PERFORMANCE @ ADJUTANT TIME.

14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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TEST
527

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 131 | 0111 1101 | 2006.88 | 2052.9 | 0.8 | 0.9 | 26.6 | 2050.3 | 2.6 |
| 132 | 0111 1100 | 2022.50 | 2066.6 | -0.1 | 0.6 | 13.7 | 2066.2 | 0.4 |
| 133 | 0111 1011 | 2038.13 | 2078.2 | -0.7 | -0.6 | 11.6 | 2082.2 | -4.0 |
| 134 | 0111 1010 | 2053.25 | 2095.9 | 0.1 | -0.9 | 17.7 | 2098.1 | -2.2 |
| 135 | 0111 1001 | 2069.38 | 2119.6 | 0.6 | 0.6 | 23.7 | 2114.1 | 5.5 |
| 136 | 0111 1000 | 2085.00 | 2122.6 | 1.0 | 0.9 | 3.0 | 2130.0 | -7.4 |
| 137 | 0111 0111 | 2100.63 | 2143.3 | -0.7 | -0.1 | 20.6 | 2146.0 | -2.7 |
| 138 | 0111 0110 | 2116.25 | 2155.8 | -0.6 | -0.5 | 12.5 | 2161.9 | -6.1 |
| 139 | 0111 0101 | 2131.88 | 2181.1 | -0.0 | -0.5 | 25.3 | 2177.8 | 3.3 |
| 140 | 0111 0100 | 2147.50 | 2196.0 | 0.7 | 0.7 | 14.8 | 2193.8 | 2.7 |
| 141 | 0111 0011 | 2163.13 | 2204.7 | 0.1 | 0.6 | 8.7 | 2209.7 | -5.1 |
| 142 | 0111 0010 | 2178.75 | 2225.1 | -0.9 | -0.9 | 20.4 | 2225.2 | -0.6 |
| 143 | 0111 0001 | 2194.38 | 2246.6 | 0.0 | 0.0 | 21.5 | 2241.6 | 5.0 |
| 144 | 0111 0000 | 2210.00 | 2256.1 | 0.3 | -0.2 | 9.5 | 2252.5 | -1.4 |
| 145 | 0110 1111 | 2225.63 | 2269.1 | 0.7 | 0.3 | 13.0 | 2273.5 | -4.4 |
| 146 | 0110 1110 | 2241.25 | 2280.5 | 0.1 | 0.9 | 11.4 | 2289.4 | -8.9 |
| 147 | 0110 1101 | 2256.88 | 2307.9 | -1.1 | -1.2 | 22.4 | 2305.4 | 2.6 |
| 148 | 0110 1100 | 2272.50 | 2324.4 | -0.1 | -0.5 | 16.4 | 2321.3 | 3.1 |
| 149 | 0110 1011 | 2288.13 | 2331.7 | 0.6 | 0.5 | 7.3 | 2337.3 | -5.5 |
| 150 | 0110 1010 | 2303.75 | 2349.4 | 0.6 | 0.6 | 12.7 | 2353.2 | -3.7 |
| 151 | 0110 1001 | 2319.38 | 2374.3 | -0.6 | 0.0 | 24.8 | 2369.1 | 5.1 |
| 152 | 0110 1000 | 2335.00 | 2383.8 | -0.8 | -0.3 | 9.5 | 2385.1 | -1.3 |
| 153 | 0110 0111 | 2350.63 | 2397.3 | -0.2 | -0.7 | 13.5 | 2401.0 | -3.7 |
| 154 | 0110 0110 | 2366.25 | 2409.5 | 0.5 | 0.4 | 12.2 | 2417.0 | -7.4 |
| 155 | 0110 0101 | 2381.88 | 2434.2 | 0.1 | 1.1 | 24.7 | 2432.9 | 1.3 |
| 156 | 0110 0100 | 2397.50 | 2454.8 | -0.3 | -0.3 | 20.6 | 2458.8 | 5.9 |
| 157 | 0110 0011 | 2413.13 | 2459.3 | -0.9 | -1.0 | 4.5 | 2464.8 | -5.5 |

ORIGINAL PAGE IS
OF POOR QUALITY

TEST: 1. THE GATED HYDRAULIC UNIT TEST MODEL: 1. F11. 5/11/73 UNCL 382

15.00 1.201 11:31:00 PENULT TEST FULL PRO-CONSIDER @ CALIBRATION TEMP.

15.00 1.201 11:31:00 11:31:00 11:31:00 11:31:00 11:31:00 11:31:00 11:31:00 11:31:00

HAC
TEST
S27

| THE GATED
NUMBER | A/D DIFFER
THRESHOLD | TIDAL
UNIT
(C/D) | ANALOG INPUT VOLTAGE (C/D) | | INCREASE
THRESHOLD | POINT | DEVIATION |
|---------------------|-------------------------|------------------------|----------------------------|-------|-----------------------|--------|-----------|
| | | | NOMINAL | LOWER | | | |
| 15.1 | 0110 0010 | 2444.25 | 2444.0 | 0.4 | 0.2 | 2480.7 | -2.7 |
| 15.2 | 0110 0001 | 2444.38 | 2444.5 | 0.1 | 1.1 | 2496.7 | 3.8 |
| 15.3 | 0110 0000 | 2450.00 | 2507.9 | -0.0 | 0.7 | 2512.6 | -4.7 |
| 15.4 | 0101 1111 | 2471.63 | 2523.7 | -1.0 | 1.6 | 2528.5 | -4.8 |
| 15.5 | 0101 1110 | 2491.25 | 2534.8 | 0.0 | -0.6 | 2544.5 | -9.7 |
| 15.6 | 0101 1101 | 2503.88 | 2561.1 | 0.6 | 0.5 | 2560.4 | 0.7 |
| 15.7 | 0101 1100 | 2522.50 | 2567.5 | 0.7 | 0.4 | 2576.5 | -8.9 |
| 15.8 | 0101 1011 | 2531.13 | 2586.4 | -0.6 | -0.0 | 2592.3 | -5.9 |
| 15.9 | 0101 1010 | 2541.25 | 2603.6 | -1.1 | 1.1 | 2603.3 | -4.6 |
| 16.0 | 0101 1001 | 2559.36 | 2628.4 | 0.0 | 0.6 | 2624.2 | 4.2 |
| 16.1 | 0101 1000 | 2575.00 | 2642.3 | 0.4 | 0.3 | 2640.1 | -7.8 |
| 16.2 | 0101 0111 | 2580.63 | 2650.5 | 0.2 | 0.9 | 2656.1 | 5.6 |
| 16.3 | 0101 0110 | 2616.25 | 2654.0 | -1.0 | -1.0 | 2672.0 | -8.0 |
| 16.4 | 0101 0101 | 2631.88 | 2689.3 | -1.0 | -0.9 | 2688.0 | 1.3 |
| 16.5 | 0101 0100 | 2647.50 | 2705.1 | 0.5 | 0.0 | 2703.9 | 1.2 |
| 16.6 | 0101 0011 | 2663.13 | 2712.8 | 0.7 | 0.7 | 2719.8 | -7.1 |
| 16.7 | 0101 0010 | 2678.75 | 2731.2 | 0.0 | 0.9 | 2735.8 | -4.1 |
| 16.8 | 0101 0001 | 2694.38 | 2755.9 | 1.1 | -0.7 | 2751.7 | 4.2 |
| 16.9 | 0101 0000 | 2710.00 | 2771.1 | -0.3 | 0.9 | 2767.7 | 3.3 |
| 17.0 | 0100 1111 | 2726.63 | 2776.8 | 1.1 | 1.1 | 2783.6 | -6.8 |
| 17.1 | 0100 1110 | 2741.25 | 2788.5 | 0.5 | 0.7 | 2799.6 | -11.1 |
| 17.2 | 0100 1101 | 2756.88 | 2815.8 | -0.7 | 0.0 | 2815.5 | 0.3 |
| 17.3 | 0100 1100 | 2772.50 | 2833.1 | -0.6 | -0.6 | 2831.4 | 1.7 |
| 17.4 | 0100 1011 | 2788.13 | 2840.5 | 0.0 | -0.5 | 2847.4 | -6.9 |
| 17.5 | 0100 1010 | 2803.75 | 2857.1 | 0.5 | 0.6 | 2853.3 | -6.7 |
| 17.6 | 0100 1001 | 2819.38 | 2881.8 | 0.1 | 0.7 | 2879.7 | 2.6 |

ORIGINAL PAGE 18
OF POOR QUALITY

DS 236 THE BATIC BATTERY BOX UNIT TEST MODEL 1, ETL 5/2/3 PAGE 383

1901/12/01 11:00:00 QUALITY TEST UNIT PERFORMANCE @ AMBIENT TEMP.

11:00:00 11:00:00 11:00:00 11:00:00 11:00:00 11:00:00 11:00:00 11:00:00 11:00:00 11:00:00

| TEST POINT NO. | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT |
|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | | | | | | | | | |
| TEST POINT NO. | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT | TEST POINT |
| 184 | 0100 | 1000 | 2885.00 | 2895.9 | -0.7 | -0.8 | 14.0 | 2895.2 | 0.7 |
| 185 | 0100 | 0111 | 2885.63 | 2905.5 | -0.8 | -1.4 | 9.6 | 2911.1 | -5.7 |
| 186 | 0100 | 0110 | 2885.25 | 2917.5 | 0.7 | 0.1 | 12.0 | 2927.1 | -9.6 |
| 187 | 0100 | 0101 | 2881.88 | 2942.8 | 0.7 | 0.7 | 35.3 | 2943.0 | -0.2 |
| 188 | 0100 | 0100 | 2897.50 | 2963.2 | 0.0 | 0.5 | 20.4 | 2969.0 | 4.3 |
| 189 | 0100 | 0011 | 2913.13 | 2967.8 | -0.8 | -0.8 | 4.6 | 2974.9 | -7.1 |
| 190 | 0100 | 0010 | 2953.75 | 2986.7 | 0.1 | -0.4 | 18.9 | 2990.8 | -4.1 |
| 191 | 0100 | 0001 | 2944.33 | 3009.5 | 0.5 | 0.4 | 2.8 | 3006.8 | 7.7 |
| 192 | 0100 | 0000 | 2960.00 | 3016.8 | 0.1 | 0.8 | 7.1 | 3022.7 | -5.9 |
| 193 | 0011 | 1111 | 2975.63 | 3032.9 | 0.6 | 0.0 | 16.1 | 3038.7 | -5.7 |
| 194 | 0011 | 1110 | 2991.25 | 3044.5 | -1.0 | -0.9 | 11.6 | 3054.6 | -10.1 |
| 195 | 0011 | 1101 | 3007.88 | 3071.9 | 0.0 | -0.5 | 27.3 | 3070.6 | 1.3 |
| 196 | 0011 | 1100 | 3022.50 | 3084.5 | 0.7 | 0.6 | 12.6 | 3086.5 | -2.0 |
| 197 | 0011 | 1011 | 3033.13 | 3096.0 | 0.0 | 0.8 | 11.5 | 3102.4 | -6.5 |
| 198 | 0011 | 1010 | 3053.75 | 3116.2 | -1.0 | -1.0 | 20.3 | 3118.4 | -2.1 |
| 199 | 0011 | 1001 | 3069.38 | 3138.9 | -1.6 | -0.6 | 22.7 | 3139.5 | 4.6 |
| 200 | 0011 | 1000 | 3085.00 | 3141.0 | 0.8 | 0.1 | 2.1 | 3150.5 | -9.5 |
| 201 | 0011 | 0111 | 3100.63 | 3160.2 | 1.1 | 1.2 | 19.2 | 3166.2 | -6.0 |
| 202 | 0011 | 0110 | 3116.25 | 3174.1 | -0.9 | 0.0 | 13.9 | 3182.1 | -8.0 |
| 203 | 0011 | 0101 | 3131.88 | 3200.1 | -0.6 | -0.6 | 26.0 | 3198.1 | 2.0 |
| 204 | 0011 | 0100 | 3147.50 | 3214.5 | 1.1 | 0.0 | 14.4 | 3214.0 | 0.5 |
| 205 | 0011 | 0011 | 3163.13 | 3223.8 | 1.1 | 0.9 | 9.3 | 3230.0 | -6.2 |
| 206 | 0011 | 0010 | 3178.75 | 3242.9 | 0.5 | 0.5 | 19.1 | 3245.9 | -3.0 |
| 207 | 0011 | 0001 | 3194.38 | 3267.5 | -2.8 | 0.7 | 24.7 | 3261.9 | 5.7 |
| 208 | 0011 | 0000 | 3210.00 | 3280.4 | -0.4 | -0.3 | 12.9 | 3277.8 | 2.6 |
| 209 | 0010 | 1111 | 3225.63 | 3289.0 | 0.7 | -0.7 | 8.6 | 3293.7 | -4.7 |

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OF POOR QUALITY

HAC
TEST
521

001001

THE ABOVE MASTER MIX UNIT TEST DROPPED 11.1% S/ZR 3 LOAD 3034
 19.0/12.701 11.1% 100 TEST UNIT PERFORMANCE @ AMBIENT TEMP.

| TEST UNIT
NUMBER | LOAD
THRESHOLD | IDEAL
VALUE
(G) | ANALOG
NOMINAL | INPUT
TOLERANCE | OUTPUT
TOLERANCE | INCREASE
FLOW PER U
THRESHOLD | BEST FIT STRAIGHT LINE
POINT | DEVIATION |
|---------------------|-------------------|-----------------------|-------------------|--------------------|---------------------|-------------------------------------|---------------------------------|-----------|
| 216 | 0010 1110 | 3287.27 | 3300.0 | 0.7 | 0.7 | 10.9 | 3309.7 | -9.7 |
| 217 | 0010 1101 | 3273.88 | 3322.3 | 6.0 | 0.7 | 22.3 | 3333.6 | 1.7 |
| 218 | 0010 1100 | 3222.50 | 3344.6 | -1.1 | -0.7 | 12.3 | 3351.5 | 3.1 |
| 219 | 0010 1011 | 3388.13 | 3382.9 | -0.7 | -0.7 | 3.2 | 3357.0 | -4.6 |
| 220 | 0010 1010 | 3303.27 | 3322.5 | 0.9 | -0.6 | 19.7 | 3323.4 | -0.9 |
| 221 | 0010 1001 | 3319.33 | 3394.7 | 0.5 | 0.9 | 22.1 | 3389.4 | 5.3 |
| 222 | 0010 1000 | 3331.00 | 3404.0 | 0.1 | 0.1 | 9.4 | 3405.3 | -1.3 |
| 223 | 0010 0111 | 3336.63 | 3418.0 | 0.7 | 0.7 | 14.0 | 3421.3 | -3.2 |
| 224 | 0010 0110 | 3336.27 | 3430.2 | 0.1 | 0.0 | 12.2 | 3452.2 | -2.0 |
| 225 | 0010 0101 | 3331.36 | 3456.2 | 0.3 | 0.5 | 25.0 | 3479.1 | 3.0 |
| 226 | 0010 0100 | 3322.50 | 3455.6 | 0.4 | 0.6 | 19.4 | 3459.1 | 6.6 |
| 227 | 0010 0011 | 3413.13 | 3481.2 | -0.3 | 0.1 | 5.6 | 3495.0 | -3.8 |
| 228 | 0010 0010 | 3413.27 | 3500.1 | -0.7 | -0.5 | 18.3 | 3501.0 | -0.9 |
| 229 | 0010 0001 | 3443.38 | 3524.2 | 0.0 | -0.5 | 24.1 | 3535.9 | 2.3 |
| 230 | 0010 0000 | 3450.00 | 3534.3 | 1.0 | 1.0 | 10.0 | 3532.9 | 1.4 |
| 231 | 0001 1111 | 3425.63 | 3545.4 | -0.4 | 0.1 | 11.1 | 3548.8 | -3.4 |
| 232 | 0001 1110 | 3491.27 | 3552.1 | -0.7 | 0.7 | 11.7 | 3564.7 | -2.7 |
| 233 | 0001 1101 | 3503.38 | 3585.5 | 0.1 | -0.0 | 23.4 | 3580.7 | 4.8 |
| 234 | 0001 1100 | 3522.50 | 3598.7 | 0.0 | 0.0 | 13.2 | 3596.5 | 2.1 |
| 235 | 0001 1011 | 3536.13 | 3611.9 | 1.1 | 1.5 | 13.2 | 3622.6 | -0.7 |
| 236 | 0001 1010 | 3533.27 | 3628.6 | -0.1 | 0.9 | 16.8 | 3628.5 | 0.1 |
| 237 | 0001 1001 | 3562.38 | 3652.8 | -0.9 | -0.6 | 24.0 | 3644.4 | 8.4 |
| 238 | 0001 1000 | 3582.00 | 3672.7 | -0.5 | 0.4 | 3.9 | 3680.4 | -2.7 |
| 239 | 0001 0111 | 3580.63 | 3674.7 | 0.9 | -0.2 | 17.0 | 3676.3 | -1.6 |
| 240 | 0001 0110 | 3596.27 | 3687.4 | 0.6 | 0.7 | 12.7 | 3692.3 | -4.8 |
| 241 | 0001 0101 | 3631.38 | 3714.6 | -0.8 | -0.0 | 22.2 | 3708.2 | 6.4 |
| 242 | 0001 0100 | 3632.50 | 3730.8 | 0.1 | -0.5 | 16.2 | 3724.7 | 6.7 |

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 OF POOR QUALITY

HAC
 1157
 S27

0010

TEST 2 - THE LOGIC MAPPER BOX UNIT TEST MODEL 1114 S/N 3 DATE 1966

190111Z01 11:32Z73 PRIORITY TEST FULL PERFORMANCE COEFFICIENT TEST

TEST 2 - THE LOGIC MAPPER BOX UNIT TEST MODEL 1114 S/N 3 DATE 1966
 TEST 2 - THE LOGIC MAPPER BOX UNIT TEST MODEL 1114 S/N 3 DATE 1966

HAC
TEST
S27

CHUCK 1 - LOW FREQUENCY (2) THE STEP 1 INCREMENT (47- 0.0 - 31.2)

THE REMAINING DATA ARE FOR INFORMATION ONLY

000100

TEST 2 - THE LOGIC MAPPER BOX UNIT TEST MODEL 1114 S/N 3 DATE 1966

1. VARIATION OF SOURCE FROM IDEAL IS: 1.692%

0.001 IS: 41.7MV

1. COEFFICIENT OF DEFORMATION IS: KXX2= .99997920

0.0001 INCH DURING DE RESTORE IS: 63.9MV

TEST 2 - THE LOGIC MAPPER BOX UNIT TEST MODEL 1114 S/N 3 DATE 1966

TEST 2 - THE LOGIC MAPPER BOX UNIT TEST MODEL 1114 S/N 3 DATE 1966

| MAXIMUM | THRESHOLD | AVERAGE | MINIMUM | THRESHOLD | STANDARD DEVIATION |
|---------|-----------|----------|---------|-----------|--------------------|
| 29.110 | 243 | 15.920MV | 1.400 | 200 | 6.649MV |

TEST 2 - THE LOGIC MAPPER BOX UNIT TEST MODEL 1114 S/N 3 DATE 1966

| MAXIMUM | THRESHOLD | AVERAGE | MINIMUM | THRESHOLD | STANDARD DEVIATION |
|---------|-----------|----------|---------|-----------|--------------------|
| 1.700 | 176 | -0.060MV | -6.000 | 10 | .926MV |

TEST 2 - THE LOGIC MAPPER BOX UNIT TEST MODEL 1114 S/N 3 DATE 1966

| MAXIMUM | THRESHOLD | AVERAGE | MINIMUM | THRESHOLD | STANDARD DEVIATION |
|---------|-----------|----------|---------|-----------|--------------------|
| 2.700 | 179 | -0.044MV | -1.700 | 193 | .619MV |

TEST 2 - THE LOGIC MAPPER BOX UNIT TEST MODEL 1114 S/N 3 DATE 1966

ORIGINAL PAGE 19
OF POOR QUALITY

TEST NAME: TORQUE-TO-MOTION POWER LOSS UNIT TEST MODEL: 22 F11, S/N 3 PAGE: 388

TEST: 12201 111 22.02 PLUGGY TEST FULL PERFORMANCE @ AMBIENT TEMP.

TEST: 12201 111 22.02 PLUGGY TEST FULL PERFORMANCE @ AMBIENT TEMP. TEST: 12201 111 22.02 PLUGGY TEST FULL PERFORMANCE @ AMBIENT TEMP.

HAC
TEST
S27

DEC 01 '81

ORIGINAL PAGE IS
OF POOR QUALITY

| TEST SHEET
NUMBER | TEST SHEET
NO. | TEST SHEET
NO. | TEST
NO. | TEST
NO. | TEST
NO. | TEST
NO. | TEST
NO. | TEST
NO. | TEST
NO. |
|----------------------|-------------------|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| TEST SHEET
NUMBER | TEST SHEET
NO. | TEST SHEET
NO. | TEST
NO. | TEST
NO. | TEST
NO. | TEST
NO. | TEST
NO. | TEST
NO. | TEST
NO. |
| 1 | 1110 | 0110 | 366.250 | 367.5 | 0.6 | 0.5 | 17.4 | 321.5 | -3.9 |
| 2 | 1110 | 0101 | 391.875 | 391.8 | 0.5 | 0.6 | 24.7 | 387.4 | 4.4 |
| 3 | 1110 | 0100 | 392.500 | 410.9 | -0.9 | 0.9 | 19.1 | 403.2 | 7.6 |
| 4 | 1110 | 0011 | 413.125 | 413.0 | -0.8 | 0.8 | 7.1 | 419.1 | -1.1 |
| 5 | 1110 | 0010 | 423.750 | 436.4 | 0.1 | 0.1 | 13.4 | 425.0 | 1.4 |
| 6 | 1110 | 0011 | 434.375 | 457.8 | 0.7 | 0.8 | 21.4 | 430.9 | 6.9 |
| 7 | 1110 | 0000 | 450.000 | 461.5 | -0.0 | 0.5 | 3.7 | 466.8 | 5.3 |
| 8 | 1101 | 1111 | 470.625 | 479.7 | -0.8 | 0.8 | 18.2 | 482.7 | -3.0 |
| 9 | 1101 | 1110 | 491.250 | 493.5 | -0.6 | 0.7 | 13.8 | 498.6 | -5.1 |
| 10 | 1101 | 1101 | 506.875 | 519.3 | 0.6 | 0.6 | 25.8 | 514.5 | 4.8 |
| 11 | 1101 | 1100 | 522.500 | 532.9 | -1.2 | 0.3 | 13.6 | 510.4 | 2.6 |
| 12 | 1101 | 1011 | 538.125 | 545.8 | -0.9 | 0.1 | 12.9 | 546.2 | -0.4 |
| 13 | 1101 | 1010 | 553.750 | 562.7 | -0.7 | 0.7 | 16.9 | 552.1 | 0.6 |
| 14 | 1101 | 1001 | 569.375 | 586.4 | 0.0 | -0.7 | 23.0 | 578.0 | 8.4 |
| 15 | 1101 | 1000 | 585.000 | 591.7 | 0.1 | 0.4 | 11.3 | 593.9 | -2.7 |
| 16 | 1101 | 0111 | 600.625 | 606.8 | 0.6 | 0.0 | 11.0 | 609.8 | -3.0 |
| 17 | 1101 | 0110 | 616.250 | 623.1 | 0.7 | -0.6 | 14.3 | 621.7 | -2.6 |
| 18 | 1101 | 0101 | 631.875 | 647.9 | -0.7 | 0.0 | 14.0 | 621.6 | 6.3 |
| 19 | 1101 | 0100 | 647.500 | 653.1 | 0.8 | -0.0 | 11.2 | 657.5 | 5.6 |
| 20 | 1101 | 0011 | 663.125 | 672.6 | 0.7 | 0.8 | 9.1 | 673.4 | -0.8 |
| 21 | 1101 | 0010 | 678.750 | 690.9 | 0.0 | 0.1 | 18.4 | 689.3 | 1.7 |
| 22 | 1101 | 0001 | 694.375 | 713.7 | -0.7 | 0.7 | 22.8 | 705.1 | 8.6 |
| 23 | 1101 | 0000 | 710.000 | 726.7 | -0.9 | 0.9 | 13.0 | 721.0 | 5.7 |
| 24 | 1100 | 1111 | 732.625 | 753.7 | 0.8 | 0.8 | 7.0 | 736.9 | -3.2 |
| 25 | 1100 | 1110 | 748.250 | 743.0 | 0.5 | 0.5 | 19.3 | 752.3 | -4.8 |
| 26 | 1100 | 1101 | 763.875 | 774.9 | 0.5 | 0.1 | 16.8 | 763.7 | 6.2 |

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OF POOR QUALITY

US 2-6 THE BATTIC POWER MAX UNIT TEST MODEL 111Y S/N 13 PAGE 309

1901 112200 111 1212 1901 BY TEST UNIT 111Y S/N 13 10 AMBIENT TEMP.

| THIS SHOULD A/D OUTPUT
NUMBER (TEST CODE) | | | DEAL
VALUE
(MO) | ANALOG INPUT
NOMINAL | DIFFERENCE
LOWER | (NO)
1 11
UPPER | INCREASE
FROM 111 0
THRESHOLD | BEST FIT STRAIGHT LINE
POINT DEVIATION | |
|--|------|------|-----------------------|-------------------------|---------------------|-----------------------|-------------------------------------|---|------|
| 52 | 1100 | 1100 | 772.500 | 786.1 | -0.7 | -0.7 | 11.2 | 784.6 | 1.5 |
| 53 | 1100 | 1011 | 788.125 | 800.4 | 0.0 | -0.8 | 14.3 | 800.5 | -0.1 |
| 54 | 1100 | 1010 | 803.250 | 816.8 | 0.7 | 0.6 | 15.4 | 816.4 | 0.4 |
| 55 | 1100 | 1001 | 819.375 | 840.1 | 0.8 | 0.7 | 23.3 | 832.3 | 7.9 |
| 56 | 1100 | 1000 | 835.000 | 851.3 | 0.7 | 0.7 | 11.2 | 848.1 | 3.2 |
| 57 | 1100 | 0111 | 850.625 | 861.6 | -0.7 | -0.6 | 10.2 | 864.0 | -2.5 |
| 58 | 1100 | 0110 | 866.250 | 876.9 | 0.5 | 0.0 | 15.3 | 879.9 | -3.0 |
| 59 | 1100 | 0101 | 881.875 | 901.2 | 0.6 | 0.6 | 24.3 | 895.8 | 5.4 |
| 60 | 1100 | 0100 | 897.500 | 919.3 | -0.1 | 0.8 | 18.1 | 911.7 | 7.6 |
| 61 | 1100 | 0011 | 913.125 | 927.2 | 0.8 | -0.8 | 7.9 | 927.6 | -0.4 |
| 62 | 1100 | 0010 | 928.750 | 945.7 | -0.6 | 0.7 | 18.5 | 943.5 | 2.2 |
| 63 | 1100 | 0001 | 944.375 | 966.6 | 0.6 | 0.7 | 20.9 | 959.4 | 7.3 |
| 64 | 1100 | 0000 | 960.000 | 975.4 | 0.6 | 0.7 | 8.3 | 975.3 | 0.2 |
| | | | | | | | | | |
| 65 | 1011 | 1111 | 975.625 | 989.2 | -0.7 | -0.1 | 13.8 | 991.1 | 1.9 |
| 66 | 1011 | 1110 | 991.250 | 1003.0 | 0.7 | 0.7 | 13.7 | 1007.0 | -4.1 |
| 67 | 1011 | 1101 | 1006.875 | 1030.5 | 0.0 | -0.9 | 27.5 | 1027.9 | 7.6 |
| 68 | 1011 | 1100 | 1022.500 | 1041.8 | 0.7 | 0.6 | 11.2 | 1038.8 | 2.9 |
| 69 | 1011 | 1011 | 1038.125 | 1054.6 | 0.8 | 0.8 | 12.8 | 1054.7 | -0.1 |
| 70 | 1011 | 1010 | 1053.750 | 1071.5 | 0.7 | -0.8 | 16.9 | 1070.6 | 0.9 |
| 71 | 1011 | 1001 | 1069.375 | 1096.0 | -0.8 | -0.7 | 24.6 | 1086.5 | 9.5 |
| 72 | 1011 | 1000 | 1085.000 | 1098.9 | 0.6 | 0.0 | 2.9 | 1102.4 | -1.5 |
| 73 | 1011 | 0111 | 1100.625 | 1115.6 | 0.6 | 0.6 | 16.7 | 1118.3 | -2.7 |
| 74 | 1011 | 0110 | 1116.250 | 1130.9 | 0.0 | 0.5 | 15.3 | 1134.2 | -3.1 |
| 75 | 1011 | 0101 | 1131.875 | 1157.2 | -0.9 | -0.9 | 26.3 | 1150.0 | 7.2 |
| 76 | 1011 | 0100 | 1147.500 | 1171.5 | -0.9 | 0.9 | 14.3 | 1165.9 | 5.6 |
| 77 | 1011 | 0011 | 1163.125 | 1181.3 | 0.8 | -0.1 | 9.8 | 1181.8 | -0.5 |
| 78 | 1011 | 0010 | 1178.750 | 1199.5 | 0.5 | 0.7 | 18.7 | 1197.7 | 1.8 |

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TPS 204 THERMATIC GUNNER AUX UNIT TEST MODEL 1, 111, SZN 3 PAGE 191

1981/12/01 1127/337 THERMATIC TEST FIRE PRO LOGBOOK 00 000000 000000 000000

1127/337 1127/337 1127/337 1127/337 1127/337 1127/337 1127/337 1127/337 1127/337 1127/337

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| TEST SHOOT 2/20 000000 | | TEST
VALU | ANALOG INTR VOLTAGE (NO) | INCREASE | BEST FIT STRAIGHT LINE | | POINT DEVIATION | |
|------------------------|-----------|--------------|--------------------------|----------|------------------------|-----------|-----------------|------|
| THRESHOLD | THRESHOLD | (V) | NOMINAL | LOWER | UPPER | THRESHOLD | | |
| 105 | 1001 0111 | 1600.63 | 1627.4 | 0.7 | 0.0 | 20.7 | 1626.7 | 0.6 |
| 108 | 1001 0110 | 1616.25 | 1636.6 | 0.6 | 0.6 | 9.2 | 1642.6 | -6.0 |
| 107 | 1001 0101 | 1631.88 | 1663.4 | 0.7 | 0.1 | 26.8 | 1658.5 | 4.9 |
| 103 | 1001 0100 | 1647.50 | 1677.7 | 0.1 | 0.0 | 14.3 | 1674.4 | 3.3 |
| 109 | 1001 0011 | 1663.13 | 1687.9 | 0.0 | 0.6 | 10.2 | 1690.3 | -2.4 |
| 110 | 1001 0010 | 1678.75 | 1705.1 | 0.6 | 0.5 | 17.2 | 1706.2 | -1.1 |
| 111 | 1001 0001 | 1694.38 | 1728.2 | 0.7 | 0.7 | 23.1 | 1722.1 | 6.2 |
| 112 | 1001 0000 | 1710.00 | 1743.5 | -0.9 | -0.1 | 15.3 | 1738.0 | 5.6 |
| 113 | 1000 1111 | 1725.63 | 1764.3 | 0.5 | 0.4 | 10.7 | 1753.8 | 0.4 |
| 119 | 1000 1110 | 1781.25 | 1761.4 | 0.6 | 0.1 | 7.2 | 1769.7 | 8.3 |
| 115 | 1000 1101 | 1796.88 | 1788.7 | 0.9 | 1.0 | 27.2 | 1785.6 | 3.1 |
| 116 | 1000 1100 | 1772.50 | 1803.5 | 0.1 | 0.9 | 14.8 | 1801.5 | 2.0 |
| 117 | 1000 1011 | 1788.13 | 1814.1 | -0.6 | 0.6 | 10.5 | 1817.4 | -3.3 |
| 118 | 1000 1010 | 1803.75 | 1830.1 | -0.4 | -0.5 | 16.1 | 1834.3 | -3.2 |
| 119 | 1000 1001 | 1819.38 | 1854.4 | 0.8 | -0.0 | 24.3 | 1849.2 | 5.2 |
| 120 | 1000 1000 | 1835.00 | 1866.4 | 0.5 | 0.5 | 12.0 | 1865.1 | 1.4 |
| 121 | 1000 0111 | 1850.63 | 1874.5 | -0.6 | 0.0 | 8.0 | 1881.0 | -6.5 |
| 122 | 1000 0110 | 1866.25 | 1890.2 | -0.6 | 0.7 | 15.7 | 1896.8 | -6.7 |
| 123 | 1000 0101 | 1881.88 | 1915.7 | 0.5 | 0.0 | 25.6 | 1912.7 | 3.0 |
| 124 | 1000 0100 | 1897.50 | 1933.3 | 0.7 | 0.2 | 17.6 | 1928.6 | 4.7 |
| 125 | 1000 0011 | 1913.13 | 1939.9 | 0.6 | 0.7 | 6.6 | 1944.5 | -4.6 |
| 126 | 1000 0010 | 1928.75 | 1958.4 | 0.5 | 0.0 | 18.5 | 1960.4 | -2.0 |
| 127 | 1000 0001 | 1944.38 | 1981.4 | -1.1 | -1.1 | 23.0 | 1976.3 | 5.1 |
| 128 | 1000 0000 | 1960.00 | 1989.7 | 1.7 | -0.2 | 8.2 | 1992.2 | -2.5 |
| 129 | 0111 1111 | 1975.63 | 2001.5 | 2.6 | 2.7 | 11.8 | 2008.1 | -6.5 |
| 130 | 0111 1110 | 1991.25 | 2016.3 | 0.1 | 0.4 | 14.8 | 2024.0 | -7.6 |

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1961 - 2011: 3/23/27 - ENJOY THE PRESENT MOMENT.

1. The first part of the document is a header section containing the following information:

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| TEST POINT NUMBER | ΔZ/D OUTPUT THRESHOLD | DETAILED OUTPUT (GROSS) | ANALOG INPUT VOLTAGE NOMINAL | INPUT VOLTAGE TOLERANCE | ΔZ/D INPUT TOLERANCE | INCREASE FROM PREVIOUS THRESHOLD | BEST FIT STRAIGHT LINE POINT | DEVIATION |
|-------------------|-----------------------|-------------------------|------------------------------|-------------------------|----------------------|----------------------------------|------------------------------|-----------|
| 1311 | 0100 1000 | 2885.00 | 2882.6 | 0.5 | 0.5 | 13.1 | 2882.0 | 0.6 |
| 1312 | 0100 0111 | 2890.43 | 2890.6 | 0.5 | 0.7 | 8.0 | 2892.9 | -2.3 |
| 1313 | 0100 0110 | 2895.25 | 2904.7 | -0.1 | 0.3 | 14.1 | 2913.8 | -9.1 |
| 1314 | 0100 0101 | 2881.80 | 2931.4 | -1.8 | 1.7 | 26.7 | 2929.7 | 1.7 |
| 1315 | 0100 0100 | 2892.50 | 2950.4 | -0.9 | 0.9 | 19.0 | 2985.5 | -4.8 |
| 1316 | 0100 0011 | 2913.13 | 2954.1 | 0.4 | 0.6 | 3.7 | 2961.4 | -7.3 |
| 1317 | 0100 0010 | 2933.25 | 2973.5 | 0.6 | 0.6 | 19.4 | 2977.3 | -3.9 |
| 1318 | 0100 0001 | 2944.08 | 2996.5 | -0.4 | 0.0 | 23.3 | 2993.2 | 3.6 |
| 1319 | 0100 0000 | 2970.00 | 3004.2 | -0.8 | -0.8 | 7.4 | 3009.1 | -4.9 |
| | | | | | | | | |
| 1320 | 0011 1111 | 2925.63 | 3018.5 | -0.2 | -1.7 | 14.3 | 3025.0 | -6.5 |
| 1321 | 0011 1110 | 2991.25 | 3031.0 | 0.6 | 0.4 | 12.5 | 3050.9 | -9.9 |
| 1322 | 0011 1101 | 3006.88 | 3059.0 | 0.5 | 0.1 | 28.0 | 3056.8 | 1.3 |
| 1323 | 0011 1100 | 3022.50 | 3070.9 | -0.7 | 0.0 | 11.8 | 3072.7 | -1.8 |
| 1324 | 0011 1011 | 3033.13 | 3083.0 | 0.6 | -0.2 | 12.1 | 3088.5 | -5.5 |
| 1325 | 0011 1010 | 3053.25 | 3099.1 | 0.6 | -0.1 | 16.1 | 3104.4 | -5.3 |
| 1326 | 0011 1001 | 3089.83 | 3124.4 | 1.5 | 0.6 | 25.2 | 3120.3 | 4.0 |
| 1327 | 0011 1000 | 3088.00 | 3125.8 | 0.1 | 0.7 | 1.4 | 3126.2 | -10.5 |
| 1328 | 0011 0111 | 3160.23 | 3146.5 | -0.8 | -1.0 | 20.7 | 3112.1 | -11.6 |
| 1329 | 0011 0110 | 3115.25 | 3150.2 | -0.6 | -0.9 | 11.7 | 3163.0 | -7.8 |
| 1330 | 0011 0101 | 3133.80 | 3186.2 | 1.2 | 0.0 | 26.0 | 3183.9 | 2.3 |
| 1331 | 0011 0100 | 3172.50 | 3200.0 | 0.6 | 0.6 | 13.8 | 3199.8 | 0.2 |
| 1332 | 0011 0011 | 3183.13 | 3210.8 | -0.8 | 0.1 | 10.8 | 3215.7 | -4.8 |
| 1333 | 0011 0010 | 3173.25 | 3229.6 | -1.0 | -1.0 | 18.7 | 3231.6 | -2.0 |
| 1334 | 0011 0001 | 3194.08 | 3252.9 | 0.1 | -0.5 | 23.3 | 3247.4 | 5.5 |
| 1335 | 0011 0000 | 3210.00 | 3252.2 | 1.0 | 0.9 | 4.8 | 3251.3 | -5.6 |
| | | | | | | | | |
| 1336 | 0010 1111 | 3225.63 | 3272.7 | 0.8 | 0.5 | 15.0 | 3279.2 | -6.5 |

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1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific information required.

DEC 01 '91

| BELL SYSTEM
CARRIER | CARRIER
THRESHOLD | CARRIER
THRESHOLD
(dB) | CARRIER
LEVELS RELATIVE
TO BELL | | CARRIER
LEVEL | CARRIER
LEVEL
THRESHOLD | BELL FIT STRAIGHT LINE | |
|------------------------|----------------------|------------------------------|---------------------------------------|-------|------------------|-------------------------------|------------------------|-----------|
| | | | NOISE | POWER | | | SIGNAL | DEVIATION |
| 20 | 0001 0011 | 3563.13 | 3723.0 | -0.4 | -0.4 | 9.3 | 3724.1 | -1.7 |
| 21 | 0001 0010 | 3581.25 | 3741.7 | -0.5 | 0.0 | 10.7 | 3730.0 | 1.7 |
| 239 | 0001 0001 | 3594.05 | 3767.0 | -0.8 | -0.8 | 20.3 | 3755.9 | 11.1 |
| 240 | 0001 0000 | 3710.00 | 3780.33 | -0.7 | 1 | 13.8 | 3771.3 | 9.0 |
| 241 | 0000 1111 | 3721.63 | 3785.4 | -1.1 | -1.1 | 4.6 | 3787.7 | -2.3 |
| 25 | 0000 1110 | 3741.25 | 3799.4 | -0.1 | -0.1 | 14.0 | 3803.6 | -4.2 |
| 26 | 0000 1101 | 3758.33 | 3833.6 | -1.1 | -1.1 | 29.1 | 3819.5 | 9.1 |
| 254 | 0000 1100 | 3772.50 | 3844.7 | -0.6 | -0.8 | 15.8 | 3835.5 | 2.0 |
| 26 | 0000 1011 | 3785.1 | 3851.33 | -0.7 | -0.0 | 7.5 | 3861.7 | -0.6 |
| 28 | 0000 1010 | 3803.25 | 3863.0 | -0.7 | -0.9 | 16.7 | 3867.1 | -0.8 |
| 267 | 0003 1001 | 3819.33 | 3895.9 | -0.7 | -0.0 | 22.9 | 3885.0 | 12.9 |
| 263 | 0000 1000 | 3825.00 | 3903.9 | -0.6 | -0.7 | 13.0 | 3898.9 | 10.0 |
| 268 | 0000 0111 | 3840.63 | 3916.1 | -0.0 | -0.8 | 7.2 | 3914.3 | 1.3 |
| 271 | 0000 0110 | 3865.15 | 3929.25 | -0.6 | -0.5 | 13.4 | 3930.7 | -1.1 |
| 272 | 0000 0101 | 3881.33 | 3956.6 | -1.2 | -1.2 | 22.0 | 3948.6 | 10.0 |
| 273 | 0000 0100 | 3897.50 | 3976.5 | -0.8 | -0.0 | 19.9 | 3982.5 | 14.1 |
| 275 | 0000 0011 | 3913.13 | 3981.3 | -0.7 | -0.7 | 4.7 | 3973.4 | 2.9 |
| 276 | 0000 0010 | 3931.25 | 3999.7 | -0.7 | -0.0 | 17.9 | 3994.2 | 4.9 |
| 287 | 0000 0001 | 3944.33 | 4024.4 | -0.6 | -0.0 | 30.2 | 4010.1 | 14.3 |

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Appendix A

Multiplexer Performance Data

CROSS-TALK TEST DATA

Section 5

REVIEWED PAGE 3
397-499
12/2/61

HAC
TEST
527

236 DELETED MOTHER MIX UNIT TEST MODEL 1111, SZN 3 PAGE 397
11/17/70 11:41:19 DENSITY TEST FULL PERFORMANCE @ AMBIENT TEMP.
DELETED MOTHER MIX UNIT TEST MODEL 1111, SZN 3 PAGE 397
DAC OFFSET S/N 17- 10 MV, IS -0.0002 V FOR INFORMATION ONLY
THRESHOLD S/N 16 TO 30 MV, IS 0.0338 V FOR INFORMATION ONLY
-10 MV S/N 17- 10 MV 17- 1 MV, IS 0.0282 V FOR INFORMATION ONLY
DIGITAL FILTER FOR DAC IN HEX IS 0104 FOR INFORMATION ONLY
31 ROW IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE 1, IF FAILED SEE SECOND ROW
30ND ROW IS COUNT OF ALL FAILED VALUE, ACCEPTABLE VALUE IS = 30 FOR E1-5, 7, 15 FOR E6

| S E N S I T I V I T Y | | | | | | | | | | | | | | | |
|-----------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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1. THEMATIC MATTER BOX UNIT TEST MODEL 2, FTL, SZN 3 PAGE 401
 12201 11210202 FINALLY TEST FULL PERFORMANCE @ ANNUAL TIME.
 2. 0.0002 V FOR INFORMATION ONLY
 3. 0.0423 V FOR INFORMATION ONLY
 4. 0.0323 V FOR INFORMATION ONLY
 5. 0.241 FOR INFORMATION ONLY
 6. ROW IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE 15 OF LATED SITE SECOND ROW
 7. ROW IS COUNT OF ALL LATED VALUE, ACCEPTABLE VALUE IS 30 FOR EL-5, 15 FOR 16



| S E N S O R | | | | | | | | | | | | | | | |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ... | ... | ... | ... | | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1 | 1 | 1 | 1 | | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | | | | | | | | | | | | |
| ... | ... | ... | ... | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

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ILLUSTRATED MATTER FOR UNIT TEST MODEL NO. 1114, 1224, 1324 PAGE 402
 2201 1124/2212 PRIORITY TEST FULL PERFORMANCE @ 20000000 Hz.
 OFFSET SIZE +/- 10 MV, IS -0.0002 V FOR INFORMATION ONLY
 FREQUENCY SIZE 15 TO 30 MV, IS 0.0001 V FOR INFORMATION ONLY
 NO. SIZE (2) - 10 TO 15 +/- 1 MV, IS 0.0001 V FOR INFORMATION ONLY
 THE PATTERN FOR DCR IN THE X IS 022A FOR INFORMATION ONLY
 NOW IS THE FIRST VALUE FOR THE ACCEPTABLE VALUE IS = 1, IF FAILED SEE SECOND ROW
 THIS IS COUNT OF ALL FAILED VALUE, ACCEPTABLE VALUE IS = 30 FOR 11, 12, 13, 14, 15, 16



| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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1. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT. PAGE 406

2. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT.

3. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT.

4. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT.

5. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT.

6. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT.

7. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT.

8. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT.

9. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT.

10. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT.

11. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT.

12. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT.

13. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT.

14. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT.

15. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT.

16. THE FOLLOWING TABLES SHOW THE TEST RESULTS FOR THE TESTED UNIT.

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| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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TEST FAILED

Test failed. Retest also failed per FR# F07296
See QCHR Sheet #11 Line #29

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R-276 THROUGH CENTER BOX UNIT TEST MODEL 1111 S/N 3 PAGE 409

1981/12/01 12:07:41 PUNLAY TEST FOR PERFORMANCE @ AMBIENT TEMP.

1) PASS OUTSIDE S/N 12-10 NO, IS -0.0002 V FOR INFORMATION ONLY
 2) THROUGH S/N 13-10 NO, IS 0.0422 V FOR INFORMATION ONLY
 3) -10 NO S/N 12-10 NO 12-10 NO, IS 0.0322 V FOR INFORMATION ONLY
 4) DIGITAL PATTERN FOR DAC IN HEX IS 0240 FOR INFORMATION ONLY
 -TEST FOR IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE - 1, IF FAILED SEE SECOND ROW
 SECOND ROW IS COUNT OF ALL FAILED VALUE, ACCEPTABLE VALUE IS - 30 FOR R1-5, 2, 15 FOR R6

| NO | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | | 1
0 | 1
0 | 1
0 |
| 2 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 |
| 3 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 |
| 4 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 |
| 5 | 1
0 | 1
0 | 1
0 | 1
0 | 1
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END PAGE 10

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Test failed. retest on pg 415 also failed. See
F.R. # F-7296 Pg 12/11 (PAC) DEC 11 '81 See GCHR sheet #11 Line 29

DEC 01 '81

10-11-68

0.0488 V FOR INFORMATION ONLY

10 PP 5/4 (7) - 10 MV +/- 1 MV, IS 0.0388 V FOR INFORMATION ONLY

2 DURING PATTERN FOR DAP IN HEX IS 0268 FOR INFORMATION ONLY

DETAILED 15 HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE -- 1, IF LATED SEE SECOND ROW

COND ROW IS COND ON ALL FAILED VALUE, ACCEPTABLE VALUE IS - 30 FOR E1-5y2, 15 FOR E6

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4. DELETED C/D: 4/- 10 MW, IS -0.0002 V FOR ESTIMATION ONLY

BT 5400 D C/F. 16 70 80 40, 15 0.0505 V FOR INFORMATION ONLY

10 100 5/11 (2) - 10 100 4/- 1 100, 15 0.0405 0 FOUR DEFORMATION ONLY

00100 FILTERED FOR DMC IN HEX 15 0231 FOR INFORMATION ONLY

FOR THE HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE - 1, IF FAILED SEE SECOND RUN

NO NEW IS CORRECT ON ALL LISTED VALUE, ACCEPTABLE VALUE IS - 30 FOR F1-5, 7, 15 FOR F6

[illegible]

1411 F33

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Retest failed per FR # F07296 by 12/1/81
See G.C.H.R. sheet #11 Line

G.C.H.R. sheet #11 Line #29

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Retest passed Rg 12/1/81

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DEC 01 '8

5. THEBATIC MATTER BOX UNIT TEST MODEL.. F11. S/N 3 PAGE 415
 12/01 12:21:45 FINALITY TEST FULL PERFORMANCE @ AMBIENT TEMP.
 1. TEST SIZE +/- 10 MV, IS -0.0002 V FOR INFORMATION ONLY
 2. TEST SIZE 15 TO 30 MV, IS 0.0489 V FOR INFORMATION ONLY
 3. TEST SIZE (2) 10 MV +/- 1 MV, IS 0.0389 V FOR INFORMATION ONLY
 TOTAL PATTERN FOR DAC IN BOX IS 0266 FOR INFORMATION ONLY
 ROW IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE - 1, IF FAILED SET SECOND ROW
 * ROW IS COUNT OF ALL FAILED VALUE, ACCEPTABLE VALUE IS 30 FOR F1-5, 7, 15 FOR 16



DEC 01 '81

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
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| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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Retest failed see FR#F7296



See QCHR.

Sheet #11 Line #29

1911-12-07 12:26:14 IN COME TEST FOUR FIRST ORCHARD BY GENE H. TAYLOR

1) Die 10 besten Lösungen (47,40 - 10,00) sind:

$\Delta \text{P} = 0.0069$ A FOR THE CHLORINE DYE

| | | |
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| 2) THE SHIELD SIZE IS 18 IN DIA. IN | 0.00000 | FOR INFORMATION ONLY |
| 3) THE SHIELD SIZE IS 18 IN DIA. IN | 0.00000 | FOR INFORMATION ONLY |

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| D | 10 | 10 | 9/18 | (Z) | - | 10 | MV | +/- | 1 | MV, | IS | | 0.00473 | Q | FUR | THE DEGRADATION ONLY | Y |
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| 10.000000 | 0.000000 | FOR THE DISTRIBUTION ONLY |

THIS FORM IS PREPARED BY THE
SECURITY INFORMATION DIVISION OF THE

SECOND ROW TO COUNT OF ALL FAILED VALUE, ACCEPTABLE VALUE IS = 30 FOR B1-5, 7, 15 FOR 16.

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| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
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U.S. DEPARTMENT OF COMMERCE BUREAU OF ECONOMIC ANALYSIS

U.S. DEPARTMENT OF JUSTICE DIVISION OF INVESTIGATION

[illegible][illegible]

• DIVERSIFIED PORTFOLIO FOR DEC IN THE 1950s 0.79% FOR THE PERIODATION FULLY

[illegible]

THEOREM 15. Let \mathcal{C} be a class of graphs. Then \mathcal{C} is a \mathcal{C}_1 -class if and only if \mathcal{C} is a \mathcal{C}_2 -class.

[illegible]

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RECORD FROM IS CORRECT ON ALL LISTED VALUE, ACCEPTABLE VALUE IS - 40 FOR E1-5, 7, 15 FOR E6

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Test failed. See I-R-F F7296 Pg 12/1/81
See QCHR
Sheet #11 Line #29

See QCHR
Sheet #11 Line #29

HS-200 THERMOC METER BOX UNIT TEST MODEL 1111 S/N 1 PAGE 420

1941717701 12:02:49 THERMOC METER TEST FOR PERFORMANCE & AMPLITUDE LIMIT.

2. THERMOC METER TEST FOR PERFORMANCE & AMPLITUDE LIMIT. (1) THERMOC METER TEST FOR PERFORMANCE & AMPLITUDE LIMIT.

(1) THERMOC METER TEST FOR PERFORMANCE & AMPLITUDE LIMIT. (1) THERMOC METER TEST FOR PERFORMANCE & AMPLITUDE LIMIT.

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(3) THERMOC METER TEST FOR PERFORMANCE & AMPLITUDE LIMIT. (3) THERMOC METER TEST FOR PERFORMANCE & AMPLITUDE LIMIT.

(4) THERMOC METER TEST FOR PERFORMANCE & AMPLITUDE LIMIT. (4) THERMOC METER TEST FOR PERFORMANCE & AMPLITUDE LIMIT.

THIRD ROW IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE - 1, IF FAILED SEE SECOND ROW

SECOND ROW IS COUNT OF ALL FAILED VALUES, ACCEPTABLE VALUE IS - 30 FOR E1 TO E7, 15 FOR E8

| 15000 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|-------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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TEST PASSED

HS 255 INMATE MAPPER BOX UNIT TEST MODEL .. P.T. 5/24/71 PAGE 421

1981/12/01 12:39:01 INMATE TEST FOR PERFORMANCE @ AMBIENT TEMP.

1) DAC OFFSET SIZE +/- 10 MV, IS -0.0002 V FOR INFORMATION ONLY

2) THRESHOLD SIZE 15 TO 80 MV, IS 0.0510 V FOR INFORMATION ONLY

3) 10 MV SIZE (2) 10 TO +/- 1 MV, IS 0.0410 V FOR INFORMATION ONLY

4) DIGITAL PATTERN FOR DAC IN HEX IS 0288 FOR INFORMATION ONLY

FIRST ROW IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE 1, IF FAILED SEE SECOND ROW

SECOND ROW IS COUNT OF ALL FAILED VALUE, ACCEPTABLE VALUE IS <= 30 FOR B1-5, 7, 15 FOR B6

| AND | S I N G I R | | | | | | | | | | | | | | | |
|-----|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 1 | 1 | 1 | 2 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 12 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 1 | 1 | 1 | 1 | | | | | | | | | | | | |
| | 0 | 0 | 0 | 0 | | | | | | | | | | | | |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
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TEST PASSED

18 - 6

| TEST NAME | TEST VALUE | TEST RESULT | TEST MESSAGE |
|-----------|------------|-------------|----------------|
| TEST 1 | 1.234567 | FAIL | TEST 1 FAILED |
| TEST 2 | 2.345678 | PASS | TEST 2 PASSED |
| TEST 3 | 3.456789 | FAIL | TEST 3 FAILED |
| TEST 4 | 4.567890 | PASS | TEST 4 PASSED |
| TEST 5 | 5.678901 | FAIL | TEST 5 FAILED |
| TEST 6 | 6.789012 | PASS | TEST 6 PASSED |
| TEST 7 | 7.890123 | FAIL | TEST 7 FAILED |
| TEST 8 | 8.901234 | PASS | TEST 8 PASSED |
| TEST 9 | 9.012345 | FAIL | TEST 9 FAILED |
| TEST 10 | 10.123456 | PASS | TEST 10 PASSED |

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 16 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 18 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 19 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 21 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 22 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 24 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 25 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 27 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 28 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 31 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 33 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 34 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 36 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 37 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 39 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 40 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 42 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 43 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 45 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 46 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 48 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 49 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 51 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 52 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 53 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 54 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 55 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 58 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 59 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 60 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 61 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 62 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 64 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 66 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 67 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 69 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 70 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 72 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 73 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 74 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 75 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 76 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 77 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 78 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 79 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 81 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 82 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 83 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 84 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 85 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 87 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 88 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 90 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 91 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 92 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 93 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 94 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 95 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 96 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 97 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 98 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 99 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 100 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 102 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 103 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 104 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 105 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 106 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 107 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 108 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 109 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 111 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 112 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 113 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 114 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 115 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 116 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 117 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 118 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 120 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 121 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | |

ORIGINAL PAGE IS
OF POOR QUALITY

25. THEORETICAL MAXIMUM TEST VALUE FOR THE TEST MODEL IS 11.5 TONS PAGE 474

THEORETICAL MAXIMUM TEST VALUE FOR THE TEST MODEL IS 11.5 TONS

THEORETICAL MAXIMUM TEST VALUE FOR THE TEST MODEL IS 11.5 TONS

THEORETICAL MAXIMUM TEST VALUE FOR THE TEST MODEL IS 11.5 TONS

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THEORETICAL MAXIMUM TEST VALUE FOR THE TEST MODEL IS 11.5 TONS

THEORETICAL MAXIMUM TEST VALUE FOR THE TEST MODEL IS 11.5 TONS

THEORETICAL MAXIMUM TEST VALUE FOR THE TEST MODEL IS 11.5 TONS



020100

TEST RESULTS

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

ORIGINAL PAGE IS
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1. TESTED

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ORIGINAL PAGE IS
OF POOR QUALITY

Page 11.

THE MAIL MATTER BOX UNIT TEST MODEL 11, ETL, SYN 3 PAGE 426



12701 12746100 TITLTY TEST TULL PERFORMANCE @ CURRENT TEMP.

12701 12746100 TITLTY TEST TULL PERFORMANCE @ CURRENT TEMP. 12701 12746100 TITLTY TEST TULL PERFORMANCE @ CURRENT TEMP.

TEST SIZE 16 TO 100, IS -0.000% V FOR INFORMATION ONLY

TEST SIZE 16 TO 100, IS 0.000% V FOR INFORMATION ONLY

TEST SIZE 16 TO 100, IS 0.040% V FOR INFORMATION ONLY

TEST PATTERN FOR BOX IN BOX IS 029E FOR INFORMATION ONLY


ROW IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE - 1, IF CALLED SEE SECOND ROW

ROW IS COUNT OF ALL FAILED VALUE, ACCEPTABLE VALUE IS - 30 FOR E1-5, 7, 15 FOR E6

| S E N S I T I V I T Y | | | | | | | | | | | | | | | |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |

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DEFECTIVE TESTS UNIT TEST MODEL 1.1.1. 570 1 PAGE 428

OF 1220000 DEFECTIVE TESTS PERFORMED @ 2000000 TESTS

DEFECTIVE TESTS PERFORMED @ 2000000 TESTS

DEFECTIVE TESTS PERFORMED @ 2000000 TESTS

DEFECTIVE TESTS PERFORMED @ 2000000 TESTS

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DEFECTIVE TESTS PERFORMED @ 2000000 TESTS

DEFECTIVE TESTS PERFORMED @ 2000000 TESTS

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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OF POOR QUALITY

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Test failed. see FR # F7296 By 12/1/81
see Q.C.H.R.
Sheet # 11 Line # 29

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HAC
TEST
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DEC 01 '84

FIG. 2
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OF POOR QUALITY

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THE FOLLOWING MODEL FOR THE TEST... PAGE 41

MODEL FOR THE TEST... THE FOLLOWING MODEL FOR THE TEST...

- (1) THE FOLLOWING MODEL FOR THE TEST... 0.0001 Q FOR THE FOLLOWING MODEL
- (2) THE FOLLOWING MODEL FOR THE TEST... 0.0001 Q FOR THE FOLLOWING MODEL
- (3) THE FOLLOWING MODEL FOR THE TEST... 0.0001 Q FOR THE FOLLOWING MODEL
- (4) THE FOLLOWING MODEL FOR THE TEST... 0.0001 Q FOR THE FOLLOWING MODEL

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| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|----|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

ORIGINAL PAGE IS
OF POOR QUALITY

THE FOLLOWING...

5.1.2. THE ABOVE METHOD OF CHECK (UNIT TEST) SHOULD BE USED FOR ALL DATA. PAGE 4.03

NOTE: THE ABOVE METHOD OF CHECK (UNIT TEST) SHOULD BE USED FOR ALL DATA. PAGE 4.03

1. THE ABOVE METHOD OF CHECK (UNIT TEST) SHOULD BE USED FOR ALL DATA. PAGE 4.03

2. THE ABOVE METHOD OF CHECK (UNIT TEST) SHOULD BE USED FOR ALL DATA. PAGE 4.03

3. THE ABOVE METHOD OF CHECK (UNIT TEST) SHOULD BE USED FOR ALL DATA. PAGE 4.03

4. THE ABOVE METHOD OF CHECK (UNIT TEST) SHOULD BE USED FOR ALL DATA. PAGE 4.03

5. THE ABOVE METHOD OF CHECK (UNIT TEST) SHOULD BE USED FOR ALL DATA. PAGE 4.03

THE ABOVE METHOD OF CHECK (UNIT TEST) SHOULD BE USED FOR ALL DATA. PAGE 4.03

THE ABOVE METHOD OF CHECK (UNIT TEST) SHOULD BE USED FOR ALL DATA. PAGE 4.03

| NO | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|----|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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OF POOR QUALITY

END OF PAGE

S-206 THEMATIC MAPPER MIX UNIT TEST MODEL: F1, S/N 3 PAGE 439

00112701 1314:02 QUALITY TEST FULL PERFORMANCE @ ADVERTISED TEST.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

1) DAC OFFSET SIZE 1/2 - 10 MV, IS -0.0001 V FOR INFORMATION ONLY

2) THRESHOLD SIZE 1/2 - 10 MV, IS 0.0466 V FOR INFORMATION ONLY

3) 10 MV SIZE (2) - 10 MV 1/2 - 1 MV, IS 0.0365 V FOR INFORMATION ONLY

4) DIGITAL PATTERN FOR DAC IN HEX IS 0243 FOR INFORMATION ONLY

TEST FOR IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE - 1, IF FAILED SEE SECOND ROW

THIRD ROW IS CORREL OF ALL FAILED VALUE, ACCEPTABLE VALUE IS - 30 FOR F1-5, 7, 15 FOR F6

| 00 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|----|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
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| 16 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
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RECEIVED THE ABOVE MENTIONED FOR THE YEAR 1967. PAGE 44

THE FOLLOWING IS A SUMMARY OF THE RESULTS OF THE ABOVE MENTIONED WORK.

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- (1) THE FOLLOWING IS A SUMMARY OF THE RESULTS OF THE ABOVE MENTIONED WORK.
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- (3) THE FOLLOWING IS A SUMMARY OF THE RESULTS OF THE ABOVE MENTIONED WORK.
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THE FOLLOWING IS A SUMMARY OF THE RESULTS OF THE ABOVE MENTIONED WORK.

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| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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3. 236 THERMALIC MATTER MIX UNIT TEST MODEL 1. FTL S/N 3 PAGE 451

92171201 13:41:00 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

4. 15. 4-11 CROSS-TALK TEST CHAND 4 SENSOR 4

- 1) DAC OFFSET SIZE +/- 10 MV, IS -0.0002 V FOR INFORMATION ONLY
- 2) THERMISTOR SIZE 15 TO 80 MV, IS 0.0456 V FOR INFORMATION ONLY
- 3) -10 MV SIZE (?) - 10 MV +/- 1 MV, IS 0.0356 V FOR INFORMATION ONLY
- 4) DIGITAL PATTERN FOR DAC IN HEX IS 0032 FOR INFORMATION ONLY
- 15.1 ROW IS HIGHEST VALUE FOUND, ACCEPTABLE VALUE IS - 1, IF FAILED SEE SECOND ROW
- 15.2 ROW IS COUNT OF ALL FAILED VALUE, ACCEPTABLE VALUE IS = 30 FOR RT-5, 15 FOR 16



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| NO | S E N S O R | | | | | | | | | | | | | | | |
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 1.0000 V FOR INFORMATION ONLY
 0.0484 V FOR INFORMATION ONLY
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 0.0484 V FOR INFORMATION ONLY
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| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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736. METRIC MATTER MIX UNIT TEST MODEL.. F17. S/N 3 PAGE 453

11/12/01 1345129 DYNAMIC TEST FULL PERFORMANCE @ AMBIENT TEMP.

TESTING OF THE METRIC MATTER MIX UNIT IS TESTED CHANNEL 4 SENSOR 4

DOE OF SET SIZE +/- 10 MV, IS -0.0002 V FOR INFORMATION ONLY

THRESHOLD SIZE 16 TO 80 MV, IS 0.0458 V FOR INFORMATION ONLY

-10 TO SIZE (2) - 10 MV +/- 1 MV, IS 0.0358 V FOR INFORMATION ONLY

DIGITAL PATTERN FOR DAC IN HEX IS 0736 FOR INFORMATION ONLY

3RD ROW IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE -- 1, IF FAILED SEE SECOND ROW

4TH ROW IS COUNT OF ALL FAILED VALUE, ACCEPTABLE VALUE IS -- 30 FOR B1-5, 7, 15 FOR B6

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| S E N S O R | | | | | | | | | | | | | | | |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
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4. THE ABOVE ANALYSIS UNIT TEST MODEL 1. ELI, SIZE 3 PAGE 4/4

12301 12342340 FORTIY TEST UNIT PRODUCTION 10 CURRENT TEMP.

1. THE TEST SIZE 12 - 10 100, 15 0.0002 V FOR INFORMATION ONLY

2. THE TEST SIZE 16 - 10 100, 15 0.0000 V FOR INFORMATION ONLY

3. THE TEST SIZE 22 - 10 100, 15 0.0000 V FOR INFORMATION ONLY

4. THE TEST SIZE 28 - 10 100, 15 0.0000 V FOR INFORMATION ONLY

5. THE TEST SIZE 34 - 10 100, 15 0.0000 V FOR INFORMATION ONLY

6. THE TEST SIZE 40 - 10 100, 15 0.0000 V FOR INFORMATION ONLY

7. THE TEST SIZE 46 - 10 100, 15 0.0000 V FOR INFORMATION ONLY



0.0181

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| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
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Page 10

TEST 2.1. THE ABOVE SAMPLES FOR EACH TEST SHOULD BE TESTED SEPARATELY

1. THE TEST SHOULD BE RUN ON A TEST UNIT WHICH IS CALIBRATED TO THE TEST METHOD.

- (1) THE TEST SHOULD BE RUN ON A TEST UNIT WHICH IS CALIBRATED TO THE TEST METHOD.
 - (2) THE TEST SHOULD BE RUN ON A TEST UNIT WHICH IS CALIBRATED TO THE TEST METHOD.
 - (3) THE TEST SHOULD BE RUN ON A TEST UNIT WHICH IS CALIBRATED TO THE TEST METHOD.
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| Sample | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
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| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
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| 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
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| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
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| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
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| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
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TEST FAILED

Test failed. See FR # F7296 By 12/1/81
See QCH R.
Sheet # 11 Line # 1

IBS 236 THERMAL METER BOX UNIT TEST MODEL 1. FLT. S/N 3 PAGE 461

1981/12/01 14:03:03 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

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TEST
527

2.0181

(1) POC OFFSET S/N 17 - 10 MV, IS -0.0002 V FOR INFORMATION ONLY
(2) THRESHOLD S/N 16 - 10 MV, IS 0.0441 V FOR INFORMATION ONLY
(3) 10 MV S/N (2) - 10 MV +/- 1 MV, IS 0.0341 V FOR INFORMATION ONLY
(4) DIGITAL PATTERN FOR DAC IN FLX IS 0211 FOR INFORMATION ONLY

FIRST ROW IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE 1, IF FAILED SEE SECOND ROW
SECOND ROW IS COUNT OF ALL FAILED VALUE, ACCEPTABLE VALUE IS 30 FOR FL-5, 15 FOR FL-6

| BAND | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
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HS 1000 - HYDRAULIC MOTOR FOR UNIT TEST MODEL 1000 - 1000 3 PAGE 462

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| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

ORIGINAL PAGE IS
OF POOR QUALITY

1000/12/01

1981/1/20 1980/1/26 - PLANTY TEST FOR PERFORMANCE @ AMBIENT TEMP.

- (1) FOR PRESET SIZE 42 - 10 00% IS -0.0001 V FOR INFORMATION ONLY
 (2) FOR THICK SIZE 15 - 10 00% IS 0.0049 V FOR INFORMATION ONLY
 (3) -10 00 SIZE 22 - 10 00% IS 0.0042 V FOR INFORMATION ONLY
 (4) DILUTION FACTOR FOR DIL IN HFZ IS 0.228 FOR INFORMATION ONLY

FIRST ROW IS THICK SIZE VALUE, SECOND ACCEPTABLE VALUE IS 1, IF LATEL SEE SECOND ROW
 SECOND ROW IS VALUE OF ALL FAILED VALUE, ACCEPTABLE VALUE IS 30 FOR F1-5, 15 FOR 16

| BOARD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 1
0 | 1
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0 | 1
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0 | 1
0 | 1
0 | 1
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0 | 1
0 |
| 2 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
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0 | 1
0 | 1
0 | 1
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| 3 | 1
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0 | 1
0 | 1
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0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
0 | 1
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0 | 1
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| 4 | 1
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0 | 1
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0 | 1
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0 | 1
0 | 1
0 | 1
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| 5 | 1
0 | 1
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0 | 1
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| 6 | 1
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| 7 | 1
0 | 1
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ORIGINAL PAGE IS
OF POOR QUALITY

TEST DATED

02266 THERMALIC MONITOR MIX UNIT TEST NORTH 1111 S.W. 3 PAGE 466

02 14201 14214208 PROPERTY TEST THERMALIC MONITOR UNIT

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02 14201 14214208 PROPERTY TEST THERMALIC MONITOR UNIT

02 14201 14214208 PROPERTY TEST THERMALIC MONITOR UNIT

| NO | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|----|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

02 14201 14214208



DEC 01 '81

ORIGINAL PAGE 18
OF POOR QUALITY

4-234 THEMATIC NUMBER MUX UNIT TEST MODEL 11 FLT. S/N 3 PAGE 467

81, 12/01 14:16:20 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

1.1.1.1.4-11 CORRECTION TEST (SECOND S SENSOR 4)

• DAC OFFSET S/E +/- 10 MV, IS -0.0002 V FOR INFORMATION ONLY

• THRESHOLD S/E 14 TO 80 MV, IS 0.0497 V FOR INFORMATION ONLY

• -10 MV S/E (%) - 10 MV +/- 1 MV, IS 0.0397 V FOR INFORMATION ONLY

• DIGITAL PATTERN FOR DAC IN HEX IS 0274 FOR INFORMATION ONLY

FIRST ROW IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE - 1, IF FAILED SEE SECOND ROW

GOOD ROW IS COUNT OF ALL FAILED VALUE, ACCEPTABLE VALUE IS = 30 FOR E1-5, 7, 15 FOR E6



| | S E N S O R | | | | | | | | | | | | | | | |
|----|-------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| NO | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 15 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 16 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

ORIGINAL PAGE IS
OF POOR QUALITY

TEST PASSED

THE MATCO MATTER BOX UNIT TEST MODEL 111, SIZE 3 PAGE 425

1981/12/01 14:33:54 PENALTY TEST UNIT PERFORMANCE @ QUALITY TIME.

HAG
TEST
527

00018

- (1) FOR FIRST SIZE 12 TO 10 NO. IS 0.0001 V FOR INFORMATION ONLY
 (2) FOR SECOND SIZE 16 TO 80 NO. IS 0.0494 V FOR INFORMATION ONLY
 (3) FOR 100 SIZE (2) 10 NO +/- 1 NO. IS 0.0594 V FOR INFORMATION ONLY
 (4) DELIVER PATTERN FOR DAY IN BOX IS 0000 FOR INFORMATION ONLY
 FIRST ROW IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE 1 V IF LATEL SE SECOND ROW
 SECOND ROW IS COUNT OF ALL LATEL VALUES, ACCEPTABLE VALUE IS 30 FOR 81-100, 15 FOR 16

| GROUP | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|-------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

ORIGINAL PAGE IS
OF POOR
QUALITY

TEST PASSED

FIG. 2-26. THE MAINT. FILTER MILK UNIT TEST MODEL 2, 111, 3/29/31 PAGE 477

1931 11 29 14:00:18 1931 11 29 14:00:18 1931 11 29 14:00:18 1931 11 29 14:00:18 1931 11 29 14:00:18

MAC
10.5
527

2.012

(1) 1200 DEPTH SIZE 42- 10 MU, IS - 0.0002 0 FOR INFORMATION ONLY

(2) 1200 DEPTH SIZE 16- 10 MU, IS - 0.0483 0 FOR INFORMATION ONLY

(3) 10 MU SIZE 22- 10 MU, IS - 0.0383 0 FOR INFORMATION ONLY

(4) DIGITAL FILTER FOR DGE IN HX IS - 0.000 0 FOR INFORMATION ONLY

1931 11 29 14:00:18 1931 11 29 14:00:18 1931 11 29 14:00:18 1931 11 29 14:00:18 1931 11 29 14:00:18

1931 11 29 14:00:18 1931 11 29 14:00:18 1931 11 29 14:00:18 1931 11 29 14:00:18 1931 11 29 14:00:18

| 1931 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

ORIGINAL PAGE IS
OF POOR QUALITY

1931 11 29 14:00:18

1981/12/01 14:42:41 PENALTY TEST FULL PERFORMANCE & AMBIENT TEMP.



- 1) DO DESI 1 S/N 47- 10 MV, IS -0.0001 V FOR INFORMATION ONLY
 2) DO SHOULD S/N 16 10 00 MV, IS 0.048 V FOR INFORMATION ONLY
 3) -10 10 S/N 22- 10 10 47- 1 MV, IS 0.0385 V FOR INFORMATION ONLY
 4) DIGITAL PATTERN FOR DO IN HEX IS 0260 FOR INFORMATION ONLY
- FIRST ROW IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE = 1, IF FAILED SEE SECOND ROW
 SECOND ROW IS COUNT OF ALL FAILED VALUE, ACCEPTABLE VALUE IS = 30 FOR E1-5, 7, 15 FOR E6

01 01 01

| | S E N S I T O R | | | | | | | | | | | | | | | |
|-----|-----------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| AND | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

END PAGE 479

ORIGINAL PAGE IS
OF POOR QUALITY

2.00 INFORMATION NUMBER BOX UNIT TEST MODEL NO. 111, 12/1/74 PAGE 484

12/1/74 147222Z DECEMBER TEST FOR INFORMATION OF AERIAL FORCE

1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

ORIGINAL PAGE IS
OF POOR QUALITY

PAGE 1

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ORIGINAL PAGE IS
OF POOR QUALITY

THE FOLLOWING INFORMATION IS FOR THE TEST MODEL AND IS NOT TO BE USED FOR OTHER MODELS. PAGE 483

THE FOLLOWING INFORMATION IS FOR THE TEST MODEL AND IS NOT TO BE USED FOR OTHER MODELS.

THE FOLLOWING INFORMATION IS FOR THE TEST MODEL AND IS NOT TO BE USED FOR OTHER MODELS.

(1) THE TEST SIZE IS 12 - 10 1/2" IS 0.0001 0 FOR THE ORIGINATOR ONLY

(2) THE TEST SIZE IS 12 - 10 1/2" IS 0.0012 0 FOR THE ORIGINATOR ONLY

(3) THE TEST SIZE IS 12 - 10 1/2" IS 0.0012 0 FOR THE ORIGINATOR ONLY

(4) THE TEST SIZE IS 12 - 10 1/2" IS 0.0012 0 FOR THE ORIGINATOR ONLY

THE FOLLOWING INFORMATION IS FOR THE TEST MODEL AND IS NOT TO BE USED FOR OTHER MODELS.

THE FOLLOWING INFORMATION IS FOR THE TEST MODEL AND IS NOT TO BE USED FOR OTHER MODELS.



| TABLE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|-------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

TEST MODEL

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HS 226 - INTERNAL METER FOR BATT TEST MODEL 226-111-5003 PAGE 493

1981/12/01 15:12:43 BATTERY TEST FULL PERFORMANCE @ ZARDET TIME.

1) 1.0 OHM SIZE 1/2 - 10 MO, IS -0.0007 V FOR INFORMATION ONLY

2) 10 OHM SIZE 1/2 - 10 MO, IS 0.0467 V FOR INFORMATION ONLY

3) 10 OHM SIZE (2) - 10 MO 1/2 - 1 MO, IS 0.0367 V FOR INFORMATION ONLY

4) INTERNAL BATTERY FOR BATT IN HEX IS 0245 FOR INFORMATION ONLY

FIRST ROW IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE - 1, IF FAILED SEE SECOND ROW

SECOND ROW IS COUNT OF ALL FAILED VALUE, ACCEPTABLE VALUE IS - 30 FOR B1-5, 7, 15 FOR B6

| ROW | S E N S I T I V I T Y | | | | | | | | | | | | | | | |
|-----|-----------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



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FACIT 499

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0.0001 U FOR INFORMATION ONLY

0.0450 U FOR INFORMATION ONLY

B. O. 3'rd Q FOR INFORMATION ONLY

0.229 FOR INITIATION ONLY

OR IS CORRECTED TO NET FAULTED VALUE, ADJUSTED VALUE IS 30 FOR EL 5,7, 15 FOR EL 6.

/ { } ()

0 0 0 0 0 0 0 0 0 0 0 0 0 0

| | | | | | | | | | | | | | | |
|----|----|----|---|---|---|----|---|---|---|---|---|---|---|---|
| 11 | 11 | 11 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|----|----|----|---|---|---|----|---|---|---|---|---|---|---|---|

[illegible]
$$0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 9 \quad 0 \quad 0 \quad 0 \quad 0 \quad 1 \quad 0 \quad 0$$
[illegible]

0 0 0 0 0 0 0 0 0 0 0 0 0 0

|| || ||

0 0 0 0 0 0 0 0 0 0 0 0 0 0

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Appendix A

Multiplexer Performance Data

THERMISTOR TEST DATA

Section 6

REVIEWED PAGES
500-578
12/2/87

HAC
TEST
527

000100

85-736 THERMATIC DAPPER MUX UNIT TEST MODEL .. FULL S/N 0 PAGE 500
1901/12/01 15:28:12 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.
DEGREES C DEGREES F DEGREES F

ACCEPTABLE VALUES ARE 0 TO 5 KOHMS
DEGREES C AND DEGREES F ARE FOR INFORMATION ONLY

F 1012

A OUT =1150.9 OHMS
DEGREES C 17.7
DEGREES F 96.2

L OUT =1206.4 OHMS
DEGREES C 34.1
DEGREES F 93.4

F 1001201000

A OUT =1132.9 OHMS
DEGREES C 36.2
DEGREES F 97.1

F OUT =1117.9 OHMS
DEGREES C 36.6
DEGREES F 97.9

TEST PASSED

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Appendix A

Multiplexer Performance Data

BILEVEL COMMANDS SIGNAL PARAMETERS DATA

Section 7

HS-236 THEMATIC MAPPER MIX UNIT TEST MODEL.. FLI. S/N 3 PAGE 501
 1981/12/01 15:28:35 PENALTY TEST FULL PERFORMANCE @ AMBIENT TEMP.

BITLEVEL COMMANDS SIGNAL PARAMETERS



DEC 01 '81

| | LOGIC 0 | LOGIC 0 | LOGIC 1(0) | LOGIC 0(0) | LOGIC 1(HI) | LOGIC 1(HI) |
|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | VOLTAGE | CURRENT | VOLTAGE | CURRENT | VOLTAGE | CURRENT |
| | 0.8 TO 1.2V | 0.0 TO .16V | 2.3 TO 2.7V | 0.0 TO 1.0V | 4.3 TO 5.2V | 0.0 TO 2.5V |
| REFLECT 1 | 1.0048 | 0.0981 | 2.5703 | 0.7037 | 5.0642 | 1.9240 |
| REFLECT 2 | 1.0728 | 0.0982 | 2.5946 | 0.7072 | 5.1114 | 1.9399 |
| SMA STATE | 1.0665 | 0.0980 | 2.5970 | 0.6921 | 5.1227 | 1.8898 |
| DC RESTORE | 0.8074 | 0.0695 | 2.4939 | 0.6516 | 5.0764 | 1.8862 |
| DC RESTORE(E) 0.8762 | | 0.0735 | 2.5151 | 0.6951 | 5.0981 | 2.0085 |

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Appendix A

Multiplexer Performance Data

A/D THRESHOLD TEST DATA

Ambient, Voltage Margin Low Bus

Section 8

IS-236 THEMATIC MAPPER MUX UNIT TEST MODEL .. FLT. S/N 3 PAGE 502
 981/12/01 15:33:23 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 .5.3.5-8 AND THRESHOLD TEST (RAND= 1, SENSOR=1)
 S U M M A R Y



ECK 1) RMS ERROR, 2) THRESHOLD INCREMENT(4/- 0.0 - THR INC (= 31.2)
 E REMAINING DATA ARE FOR INFORMATION ONLY

BEST FIT STRAIGHT LINE IS: $Y = -15.799X - 48.9MV$

DEVIATION OF SLOPE FROM IDEAL IS: 1.112%
 OFFSET IS: -48.9MV
 COEFFICIENT OF DETERMINATION IS: $R^2 = .99997970$
 ANALOG INPUT DURING DC RESTORE IS: 64.2MV

RMS ERROR = 5.213MV REMIT: RMS ERROR <= 7.812MV

THRESHOLD INCREMENT MEASUREMENT

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 28.1MV | 243 | 15.873MV | 0.1MV | 32 | 6.012MV |

LOWER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 2.1MV | 147 | -0.113MV | -7.0MV | 209 | 1.082MV |

UPPER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|---------|---------|-------------|--------------------|
| 6.6MV | 249 | 0.111MV | -1.2MV | 203 | 1.056MV |

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776 THERMATIC MAPPER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 503
 81/12/01 15:33:37 FIDELITY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 1111.5-13 AND THRESHOLD TEST (RAND)= 1 SENSOR=1

HAC
 TEST
 527

THRESHOLD AND OUTPUT ANALOG INPUT VOLTAGE (MV) INCREASE BEST FIT STRAIGHT LINE
 UPPER THRESHOLD VALUE LEVELS RATIO= 1:1 FROM PREV POINT DEVIATION
 (MV) NOMINAL LOWER UPPER THRESHOLD

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | | | |
|----|------|------|---------|-------|------|------|------|-------|------|
| 1 | 1111 | 1111 | -24.375 | -39.3 | -0.6 | -0.7 | | -33.1 | -6.2 |
| 2 | 1111 | 1110 | -8.750 | -25.9 | 0.8 | -0.0 | 13.5 | -17.3 | -8.5 |
| 3 | 1111 | 1101 | 6.875 | -1.4 | 0.8 | 0.8 | 24.4 | -1.5 | 0.1 |
| 4 | 1111 | 1100 | 22.500 | 12.7 | -0.1 | 0.8 | 14.1 | 14.3 | -1.6 |
| 5 | 1111 | 1011 | 38.125 | 26.8 | -0.8 | -0.9 | 14.2 | 30.1 | -3.2 |
| 6 | 1111 | 1010 | 53.750 | 43.3 | -0.9 | -0.8 | 16.4 | 45.9 | -2.6 |
| 7 | 1111 | 1001 | 69.375 | 64.6 | 0.8 | 0.1 | 21.3 | 61.7 | 2.9 |
| 8 | 1111 | 1000 | 85.000 | 70.8 | 0.8 | 0.8 | 6.2 | 77.5 | -6.6 |
| 9 | 1111 | 0111 | 100.625 | 86.1 | -1.0 | 0.0 | 17.3 | 93.3 | -5.1 |
| 10 | 1111 | 0110 | 116.250 | 104.5 | -0.7 | -0.7 | 16.3 | 109.1 | -4.6 |
| 11 | 1111 | 0101 | 131.875 | 126.9 | -0.0 | -0.9 | 22.4 | 124.9 | 2.0 |
| 12 | 1111 | 0100 | 147.500 | 142.9 | 0.8 | 0.8 | 16.1 | 140.7 | 2.3 |
| 13 | 1111 | 0011 | 163.125 | 153.3 | 0.9 | 0.9 | 10.4 | 156.4 | -3.1 |
| 14 | 1111 | 0010 | 178.750 | 172.9 | -0.8 | -0.1 | 19.6 | 172.2 | 0.6 |
| 15 | 1111 | 0001 | 194.375 | 192.7 | -0.9 | -0.7 | 19.8 | 188.0 | 4.7 |
| 16 | 1111 | 0000 | 210.000 | 199.3 | 1.0 | 0.0 | 6.6 | 207.8 | -4.5 |
| 17 | 1110 | 1111 | 225.625 | 214.8 | 0.7 | 0.8 | 15.4 | 219.6 | -4.9 |
| 18 | 1110 | 1110 | 241.250 | 229.2 | -0.1 | 0.8 | 14.5 | 235.4 | -6.2 |
| 19 | 1110 | 1101 | 256.875 | 254.3 | -0.9 | -0.9 | 25.1 | 251.2 | 3.1 |
| 20 | 1110 | 1100 | 272.500 | 267.6 | -1.0 | -0.8 | 13.3 | 267.0 | 0.6 |
| 21 | 1110 | 1011 | 288.125 | 280.8 | 0.8 | 0.1 | 13.2 | 282.8 | -2.0 |
| 22 | 1110 | 1010 | 303.750 | 297.6 | 0.8 | 0.7 | 16.8 | 298.6 | -1.0 |
| 23 | 1110 | 1001 | 319.375 | 320.5 | -1.0 | 0.0 | 22.9 | 314.4 | 6.1 |
| 24 | 1110 | 1000 | 335.000 | 329.9 | -0.9 | -0.9 | 9.4 | 330.2 | -0.3 |
| 25 | 1110 | 0111 | 350.625 | 342.9 | -0.1 | -0.9 | 13.0 | 346.0 | -3.1 |

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236 THEMATIC MAPPER MUX UNIT TEST MODEL.. F11. S/N 5 PAGE 504
 11/12/01 15:33:37 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 5-14-5-B A/D THRESHOLD TEST (HAND= 1, SENSOR=1)



DEC 01 2001

| SHOUL A/D OUTPUT
MUX:K THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|-------------------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 26 1110 0110 | 466.250 | 358.8 | 0.6 | 0.7 | 15.9 | 361.8 | -3.0 |
| 27 1110 0101 | 381.875 | 380.8 | 0.9 | 0.8 | 21.9 | 377.6 | 3.2 |
| 28 1110 0100 | 397.500 | 400.9 | -0.9 | 0.0 | 20.1 | 393.4 | 7.5 |
| 29 1110 0011 | 413.125 | 408.8 | -0.8 | -0.7 | 7.8 | 409.2 | -0.4 |
| 30 1110 0010 | 428.750 | 426.9 | 0.7 | 0.0 | 18.1 | 425.0 | 1.9 |
| 31 1110 0001 | 444.375 | 446.7 | 0.7 | 0.8 | 19.8 | 440.8 | 5.8 |
| 32 1110 0000 | 460.000 | 446.8 | 0.1 | 0.9 | 0.1 | 456.6 | -9.8 |
| 33 1101 1111 | 475.625 | 469.7 | -0.9 | -0.9 | 22.9 | 472.4 | -2.8 |
| 34 1101 1110 | 491.250 | 483.4 | -0.8 | -0.7 | 13.7 | 488.2 | -4.8 |
| 35 1101 1101 | 506.875 | 507.6 | 0.8 | 0.0 | 24.2 | 504.0 | 3.6 |
| 36 1101 1100 | 522.500 | 518.0 | 0.8 | 0.8 | 10.4 | 519.8 | -1.8 |
| 37 1101 1011 | 538.125 | 535.6 | -0.8 | 0.1 | 17.6 | 535.6 | 0.0 |
| 38 1101 1010 | 553.750 | 551.7 | -0.6 | -0.6 | 16.0 | 551.4 | 0.2 |
| 39 1101 1001 | 569.375 | 574.5 | -0.0 | -0.8 | 22.8 | 567.2 | 7.3 |
| 40 1101 1000 | 585.000 | 581.5 | 0.7 | 0.8 | 7.0 | 583.0 | -1.5 |
| 1 1101 0111 | 600.625 | 595.8 | 0.8 | 0.8 | 14.3 | 598.8 | -3.0 |
| 2 1101 0110 | 616.250 | 612.7 | -0.9 | -0.0 | 16.8 | 614.6 | -2.0 |
| 3 1101 0101 | 631.875 | 635.6 | -0.8 | -0.8 | 22.9 | 630.4 | 5.2 |
| 4 1101 0100 | 647.500 | 651.9 | 0.8 | 0.0 | 16.3 | 646.2 | 5.7 |
| 5 1101 0011 | 663.125 | 661.6 | 0.9 | 0.9 | 9.6 | 662.0 | -0.5 |
| 6 1101 0010 | 678.750 | 679.8 | 0.0 | 0.8 | 18.2 | 677.8 | 2.0 |
| 7 1101 0001 | 694.375 | 701.1 | -0.7 | -0.8 | 21.3 | 693.6 | 7.5 |
| 8 1101 0000 | 710.000 | 712.4 | -1.0 | -0.9 | 11.4 | 709.4 | 3.0 |
| 9 1100 1111 | 725.625 | 727.5 | 0.7 | 0.8 | 10.2 | 725.2 | -2.7 |
| 0 1100 1110 | 741.250 | 736.7 | 0.8 | 0.8 | 14.2 | 741.0 | -4.3 |
| 1 1100 1101 | 756.875 | 762.1 | -0.9 | 0.0 | 25.4 | 756.8 | 5.3 |

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16 THEMATIC MAPPER MIX UNIT TEST MODEL.. F11. S/N 3 PAGE 505

11/20/81 15:33:32 FINALITY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

11/20/81 15:33:32 THRESHOLD TEST CHANNELS = 1 + SENSOR = 1

HAC
TEST
527

0.0181

| A/D OUTPUT | | IDEAL | ANALOG INPUT VOLTAGE (MV) | | | INCREASE | BEST FIT STRAIGHT LINE | |
|------------|-----------|---------|---------------------------|-------|-------|-----------|------------------------|-----------|
| LR | THRESHOLD | VALUE | LEVELS RATIO= 1:1 | | | FROM PREV | | |
| | | (MV) | NOMINAL | LOWER | UPPER | THRESHOLD | POINT | DEVIATION |
| 1100 | 1100 | 772.500 | 774.9 | -0.9 | -0.9 | 12.7 | 772.6 | 2.3 |
| 1100 | 1011 | 788.125 | 789.1 | 0.0 | -0.9 | 14.2 | 788.4 | 0.7 |
| 1100 | 1010 | 803.750 | 804.7 | 0.5 | 0.6 | 15.6 | 804.2 | 0.5 |
| 1100 | 1001 | 819.375 | 827.1 | 0.9 | 0.7 | 22.4 | 820.0 | 7.1 |
| 1100 | 1000 | 835.000 | 839.7 | -0.8 | -0.8 | 12.6 | 835.8 | 3.9 |
| 1100 | 0111 | 850.625 | 849.7 | -0.8 | -0.8 | 10.0 | 851.6 | -1.9 |
| 1100 | 0110 | 866.250 | 865.0 | 0.9 | 0.0 | 15.3 | 867.4 | -2.4 |
| 1100 | 0101 | 881.875 | 887.8 | 0.9 | 0.9 | 22.7 | 883.2 | 4.6 |
| 1100 | 0100 | 897.500 | 906.7 | -0.1 | 1.0 | 18.9 | 899.0 | 7.7 |
| 1100 | 0011 | 913.125 | 915.1 | -0.7 | -0.8 | 8.4 | 914.8 | 0.3 |
| 1100 | 0010 | 928.750 | 933.4 | -0.7 | -0.8 | 18.4 | 930.6 | 2.9 |
| 1100 | 0001 | 944.375 | 953.0 | 0.8 | 0.9 | 19.5 | 946.4 | 6.6 |
| 1100 | 0000 | 960.000 | 959.4 | 1.0 | 1.0 | 6.5 | 962.2 | -2.7 |
| 1011 | 1111 | 975.625 | 978.5 | -0.9 | -0.0 | 19.1 | 978.0 | 0.6 |
| 1011 | 1110 | 991.250 | 992.1 | -0.7 | -0.7 | 13.6 | 993.8 | -1.6 |
| 1011 | 1101 | 1006.88 | 1017.6 | -0.1 | -0.9 | 25.5 | 1009.6 | 8.1 |
| 1011 | 1100 | 1022.50 | 1030.2 | 0.9 | 0.9 | 12.6 | 1025.4 | 4.9 |
| 1011 | 1011 | 1038.13 | 1043.2 | 0.8 | 0.8 | 13.0 | 1041.2 | 2.1 |
| 1011 | 1010 | 1053.75 | 1060.0 | -0.8 | -0.8 | 16.8 | 1057.0 | 3.0 |
| 1011 | 1001 | 1069.38 | 1083.1 | -0.9 | -0.9 | 23.0 | 1072.8 | 10.3 |
| 1011 | 1000 | 1085.00 | 1087.2 | 0.8 | -0.0 | 4.2 | 1083.6 | -1.3 |
| 1011 | 0111 | 1100.63 | 1103.8 | 0.8 | 0.9 | 16.5 | 1104.4 | -0.6 |
| 1011 | 0110 | 1116.25 | 1119.7 | -0.1 | 0.7 | 15.9 | 1120.2 | -0.5 |
| 1011 | 0101 | 1131.88 | 1143.7 | -0.8 | -0.9 | 24.0 | 1136.0 | 7.7 |
| 1011 | 0100 | 1147.50 | 1159.0 | -0.9 | -0.9 | 15.3 | 1151.8 | 7.2 |
| 1011 | 0011 | 1163.13 | 1169.1 | 0.9 | 1.0 | 10.1 | 1167.6 | 1.5 |
| 1011 | 0010 | 1178.75 | 1187.1 | 0.7 | 0.7 | 18.1 | 1183.4 | 3.8 |

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36 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 506

12/01 15:03:37 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

1.3.5-B AND THRESHOLD TEST (BAND= 1, SENSOR=1)



| A/D OUTPUT
TR THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|----------------------------|------------------------|---------------------------|----------------------------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LEVELS RATIO= 1:1
LOWER | UPPER | | POINT | DEVIATION |
| 1 1011 0001 | 1194.38 | 1208.9 | -0.9 | 0.0 | 21.7 | 1199.2 | 9.7 |
| 1 1011 0000 | 1210.00 | 1215.6 | -0.9 | -0.8 | 6.7 | 1215.0 | 0.7 |
| 1 1010 1111 | 1275.63 | 1230.6 | 0.0 | -0.8 | 14.9 | 1230.8 | -0.2 |
| 1 1010 1110 | 1241.25 | 1243.8 | 0.8 | 0.8 | 13.2 | 1246.6 | -2.7 |
| 1 1010 1101 | 1256.88 | 1268.8 | 1.0 | 0.9 | 20.0 | 1262.4 | 6.5 |
| 1 1010 1100 | 1272.50 | 1281.2 | -0.8 | -1.0 | 12.3 | 1278.2 | 3.0 |
| 1 1010 1011 | 1288.13 | 1296.2 | -0.9 | -0.8 | 15.0 | 1294.0 | 2.2 |
| 1 1010 1010 | 1303.75 | 1311.6 | 0.8 | 0.1 | 15.4 | 1309.8 | 1.8 |
| 1 1010 1001 | 1319.38 | 1334.3 | 0.9 | 0.8 | 22.7 | 1325.6 | 8.8 |
| 1 1010 1000 | 1335.00 | 1342.6 | -0.0 | 0.9 | 8.2 | 1341.4 | 1.2 |
| 1 1010 0111 | 1350.63 | 1356.6 | -0.9 | -0.9 | 14.0 | 1357.2 | -0.6 |
| 1 1010 0110 | 1366.25 | 1372.5 | -0.8 | -0.7 | 15.9 | 1373.0 | -0.4 |
| 1 1010 0101 | 1381.88 | 1394.9 | 0.8 | 0.9 | 22.4 | 1388.8 | 6.2 |
| 1 1010 0100 | 1397.50 | 1414.4 | -0.8 | 0.9 | 19.5 | 1404.6 | 9.9 |
| 1 1010 0011 | 1413.13 | 1421.9 | -0.9 | -0.0 | 7.5 | 1420.4 | 1.5 |
| 1 1010 0010 | 1428.75 | 1440.0 | -0.8 | -0.8 | 18.1 | 1436.2 | 3.8 |
| 1 1010 0001 | 1444.38 | 1460.9 | 0.0 | -1.0 | 20.9 | 1451.9 | 8.9 |
| 1 1010 0000 | 1460.00 | 1462.1 | 0.9 | 0.9 | 1.2 | 1467.7 | -5.7 |
| 1 1001 1111 | 1475.63 | 1481.1 | 0.8 | 0.8 | 19.0 | 1483.5 | -2.4 |
| 1 1001 1110 | 1491.25 | 1495.4 | -0.8 | -0.8 | 14.3 | 1499.3 | -3.9 |
| 1 1001 1101 | 1506.88 | 1521.5 | -0.8 | -0.8 | 26.1 | 1515.1 | 6.4 |
| 1 1001 1100 | 1522.50 | 1528.9 | 1.0 | 0.1 | 7.3 | 1530.9 | -2.1 |
| 1 1001 1011 | 1538.13 | 1546.7 | 0.9 | 0.9 | 17.8 | 1546.7 | -0.1 |
| 1 1001 1010 | 1553.75 | 1562.1 | -0.0 | 0.8 | 15.4 | 1562.5 | -0.4 |
| 1 1001 1001 | 1569.38 | 1586.7 | -0.8 | -0.9 | 24.5 | 1578.3 | 8.3 |
| 1 1001 1000 | 1585.00 | 1593.1 | -0.8 | -0.9 | 6.4 | 1594.1 | -1.0 |

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THEMATIC MAPPER AUX UNIT TEST MODEL 11 FIT. SYN 3 PAGE 507

12201 153035Z QUALITY TEST ACCEPTANCE IN AMBIENT VOLTAGE MARGIN LOW BUS

11.1.1-14 12201 153035Z QUALITY TEST ACCEPTANCE IN AMBIENT VOLTAGE MARGIN LOW BUS SENSITIVE=1



00101

| AD AND OUTPUT
F THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | DIFFERENCE
FROM IDEAL
THRESHOLD | BEST FIT STRAIGHT LINE | |
|------------------------------|------------------------|---------------------------|-------|-------|---------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 1001 0111 | 1600.63 | 1602.1 | 0.9 | 0.9 | 14.0 | 1609.9 | -2.8 |
| 1001 0110 | 1616.25 | 1622.7 | 0.7 | 0.7 | 15.6 | 1625.7 | -3.0 |
| 1001 0101 | 1631.08 | 1647.6 | -0.9 | 0.0 | 24.8 | 1641.5 | 6.0 |
| 1001 0100 | 1647.50 | 1663.1 | -0.9 | -0.9 | 15.6 | 1657.3 | 5.8 |
| 1001 0011 | 1663.13 | 1673.3 | 0.0 | -1.0 | 10.2 | 1673.1 | 0.2 |
| 1001 0010 | 1678.75 | 1690.1 | 0.7 | 0.8 | 16.7 | 1698.9 | 1.1 |
| 1001 0001 | 1694.38 | 1711.5 | 0.9 | 0.9 | 21.4 | 1704.7 | 6.7 |
| 1001 0000 | 1710.00 | 1726.3 | -1.0 | -1.1 | 14.8 | 1720.5 | 5.8 |
| 1000 1111 | 1725.63 | 1733.7 | -0.9 | -0.9 | 7.4 | 1736.3 | -2.6 |
| 1000 1110 | 1741.25 | 1746.7 | 0.8 | -0.8 | 12.9 | 1752.1 | -5.5 |
| 1000 1101 | 1756.88 | 1772.5 | 0.8 | 0.8 | 25.9 | 1767.9 | 4.6 |
| 1000 1100 | 1772.50 | 1783.2 | 0.0 | 1.0 | 10.6 | 1783.7 | -0.6 |
| 1000 1011 | 1788.13 | 1799.3 | -0.8 | -0.9 | 16.2 | 1799.5 | -0.2 |
| 1000 1010 | 1803.75 | 1815.3 | 0.0 | 0.8 | 16.0 | 1815.3 | -0.0 |
| 1000 1001 | 1819.38 | 1837.6 | 1.0 | 1.1 | 22.3 | 1831.1 | 6.5 |
| 1000 1000 | 1835.00 | 1849.5 | 0.9 | 0.9 | 11.8 | 1846.9 | 2.6 |
| 1000 0111 | 1850.63 | 1860.0 | -1.2 | -1.4 | 10.5 | 1862.7 | -2.7 |
| 1000 0110 | 1866.25 | 1875.4 | -0.9 | 0.8 | 15.1 | 1878.5 | -3.1 |
| 1000 0101 | 1881.88 | 1899.2 | 0.0 | -0.9 | 23.8 | 1894.3 | 4.9 |
| 1000 0100 | 1897.50 | 1916.4 | 0.9 | 0.9 | 12.1 | 1910.1 | 6.1 |
| 1000 0011 | 1913.13 | 1924.1 | -0.0 | 0.9 | 7.7 | 1925.9 | -1.8 |
| 1000 0010 | 1928.75 | 1942.7 | -0.8 | -0.8 | 18.6 | 1941.7 | 1.0 |
| 1000 0001 | 1944.38 | 1964.1 | -0.9 | -0.8 | 21.4 | 1957.5 | 6.6 |
| 1000 0000 | 1960.00 | 1978.1 | 1.1 | 0.0 | 14.0 | 1973.3 | 4.8 |
| 0111 1111 | 1975.63 | 1981.5 | 0.9 | 0.8 | 3.4 | 1989.1 | -7.6 |
| 0111 1110 | 1991.25 | 1996.4 | 0.0 | 0.8 | 14.8 | 2004.9 | -8.5 |

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THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 508
 2/01 15:33:37 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 0.5-14 A/D THRESHOLD TEST (HAND)= 1, SENSOR=1



| D A/D OUTPUT
(THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCRFASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|-----------------------------|------------------------|---------------------------|------------------------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LEVELS RATIO-
LOWER | UPPER | | POINT | DEVIATION |
| 0111 1101 | 2006.88 | 2022.0 | -0.8 | -0.9 | 25.6 | 2020.7 | 1.3 |
| 0111 1100 | 2022.50 | 2037.9 | -5.8 | -0.9 | 15.9 | 2036.5 | 1.4 |
| 0111 1011 | 2038.13 | 2046.9 | 0.9 | 1.0 | 8.9 | 2052.3 | -5.5 |
| 0111 1010 | 2053.75 | 2063.9 | 1.1 | 0.9 | 17.1 | 2068.1 | -4.2 |
| 0111 1001 | 2069.38 | 2088.1 | -0.9 | 0.0 | 24.2 | 2083.9 | 4.2 |
| 0111 1000 | 2085.00 | 2094.4 | -0.9 | -0.9 | 6.2 | 2099.7 | -5.3 |
| 0111 0111 | 2100.63 | 2108.5 | -0.0 | -1.0 | 14.2 | 2115.5 | -7.0 |
| 0111 0110 | 2116.25 | 2124.7 | 0.8 | 0.7 | 15.1 | 2131.3 | -6.6 |
| 0111 0101 | 2131.88 | 2147.4 | 0.1 | 1.0 | 22.7 | 2147.1 | 0.3 |
| 0111 0100 | 2147.50 | 2165.1 | -0.8 | -0.8 | 17.8 | 2162.9 | 2.2 |
| 0111 0011 | 2163.13 | 2173.8 | -1.0 | -0.9 | 8.6 | 2178.7 | -4.9 |
| 0111 0010 | 2178.75 | 2191.9 | 0.8 | 0.1 | 18.1 | 2194.5 | -2.6 |
| 0111 0001 | 2194.38 | 2213.4 | 0.9 | 0.9 | 21.5 | 2210.3 | 3.1 |
| 0111 0000 | 2210.00 | 2221.4 | 0.0 | 1.0 | 8.0 | 2226.1 | -4.7 |
| 0110 1111 | 2225.63 | 2234.6 | 0.4 | -0.8 | 13.2 | 2241.9 | -7.3 |
| 0110 1110 | 2241.25 | 2249.7 | -0.0 | -1.0 | 15.1 | 2257.7 | -8.0 |
| 0110 1101 | 2256.88 | 2273.4 | 2.1 | 2.2 | 23.7 | 2273.5 | -0.1 |
| 0110 1100 | 2272.50 | 2285.6 | 1.1 | 1.1 | 12.2 | 2289.3 | -3.7 |
| 0110 1011 | 2288.13 | 2300.0 | -0.9 | 0.0 | 14.4 | 2305.1 | -5.1 |
| 0110 1010 | 2303.75 | 2317.3 | -0.8 | -0.1 | 17.3 | 2320.9 | -3.6 |
| 0110 1001 | 2319.38 | 2340.1 | 0.0 | -0.9 | 22.8 | 2336.7 | 3.4 |
| 0110 1000 | 2335.00 | 2346.8 | 1.0 | 1.0 | 6.7 | 2352.5 | -5.7 |
| 0110 0111 | 2350.63 | 2359.6 | 0.0 | 0.9 | 12.8 | 2368.3 | -8.6 |
| 0110 0110 | 2366.25 | 2377.6 | -0.8 | -0.9 | 18.0 | 2384.1 | -6.4 |
| 0110 0101 | 2381.88 | 2400.2 | -1.0 | -0.9 | 22.6 | 2399.9 | 0.4 |
| 0110 0100 | 2397.50 | 2420.9 | 0.9 | -0.0 | 20.6 | 2415.7 | 5.2 |
| 0110 0011 | 2413.13 | 2424.8 | 0.9 | 0.8 | 4.0 | 2431.5 | -6.6 |

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THEMATIC MODEL: BOX UNIT TEST MODEL: FLI. S/N 3 PAGE 509
 01 15:33:37 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 -1.5-1.5 AND THRESHOLD IS 1.51 (CH000)= 1, SENSE=1

HAC
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527

| A/D OUTPUT
THRESHOLD | DIGITAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|-------------------------|--------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 0110 0010 | 2428.75 | 2444.1 | -0.0 | 0.9 | 19.2 | 2447.3 | -3.2 |
| 0110 0001 | 2444.38 | 2466.1 | -0.9 | -0.9 | 22.0 | 2463.1 | 3.0 |
| 0110 0000 | 2460.00 | 2468.7 | 0.0 | -0.9 | 2.6 | 2473.9 | -10.2 |
| 0101 1111 | 2475.63 | 2485.4 | 0.8 | 1.8 | 16.7 | 2494.7 | -9.3 |
| 0101 1110 | 2491.25 | 2499.8 | 0.9 | 0.8 | 14.4 | 2510.5 | -10.7 |
| 0101 1101 | 2506.88 | 2527.0 | -1.0 | -0.0 | 27.3 | 2526.3 | 0.8 |
| 0101 1100 | 2522.50 | 2535.7 | -1.1 | -0.9 | 8.7 | 2542.1 | -6.3 |
| 0101 1011 | 2538.13 | 2551.8 | -0.0 | -1.0 | 16.0 | 2557.9 | -6.1 |
| 0101 1010 | 2553.75 | 2567.3 | 4.0 | 1.0 | 15.5 | 2573.7 | -6.4 |
| 0101 1001 | 2569.38 | 2590.8 | 0.0 | 1.0 | 23.6 | 2589.5 | 1.4 |
| 0101 1000 | 2585.00 | 2600.8 | -0.9 | -1.0 | 10.0 | 2605.3 | -4.4 |
| 0101 0111 | 2600.63 | 2612.3 | -1.0 | 0.4 | 11.5 | 2621.1 | -8.7 |
| 0101 0110 | 2616.25 | 2627.8 | 0.9 | 0.0 | 15.1 | 2636.9 | -9.0 |
| 0101 0101 | 2631.88 | 2651.1 | 0.9 | 0.9 | 23.3 | 2652.7 | -1.5 |
| 0101 0100 | 2647.50 | 2668.8 | 0.0 | 0.9 | 17.7 | 2668.5 | 0.4 |
| 0101 0011 | 2663.13 | 2677.5 | -0.8 | -0.9 | 8.6 | 2684.3 | -6.8 |
| 0101 0010 | 2678.75 | 2696.4 | 0.0 | -0.9 | 18.9 | 2700.1 | -3.6 |
| 0101 0001 | 2694.38 | 2717.1 | 0.8 | 0.8 | 20.6 | 2715.9 | 1.2 |
| 0101 0000 | 2710.00 | 2728.3 | 1.1 | 1.1 | 11.2 | 2731.6 | -3.3 |
| 0100 1111 | 2725.63 | 2739.3 | -0.8 | 0.0 | 11.0 | 2747.4 | -8.1 |
| 0100 1110 | 2741.25 | 2753.0 | -0.9 | -0.7 | 13.6 | 2753.2 | -10.3 |
| 0100 1101 | 2756.88 | 2779.2 | -0.0 | 0.9 | 26.2 | 2779.0 | 0.1 |
| 0100 1100 | 2772.50 | 2789.3 | 0.9 | 0.9 | 10.1 | 2794.8 | -5.5 |
| 0100 1011 | 2788.13 | 2802.9 | 0.0 | 1.0 | 13.5 | 2810.6 | -7.8 |
| 0100 1010 | 2803.75 | 2821.1 | -0.8 | -1.2 | 18.2 | 2826.4 | -5.4 |
| 0100 1001 | 2819.38 | 2843.9 | -1.0 | -0.9 | 22.8 | 2842.2 | 1.7 |

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15:33:37 FINAITY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

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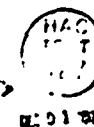
HS-236 THERMATIC METER MUZ UNIT TEST MODEL .. FLT. 52N 3 PAGE 512
 1981/12/01 15:33:37 EQUALITY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 (3.11,3.5,-0.0) AND THRESHOLD TEST (FRONT)= 1, SENSOR=1



| THRESHOLD
NUMBER | AND
THRESHOLD | IDEAL
VALUE
(KV) | ANALOG INPUT VOLTAGE (KV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FLT STRAIGHT LINE | |
|---------------------|------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 237 | 0001 0011 | 3663.13 | 3694.8 | -0.0 | 1.1 | 8.6 | 3695.4 | -0.6 |
| 238 | 0001 0010 | 3678.75 | 3714.7 | -1.0 | -1.0 | 19.8 | 3711.7 | 3.5 |
| 239 | 0001 0001 | 3694.38 | 3736.7 | -1.1 | -0.9 | 22.1 | 3727.0 | 9.8 |
| 240 | 0001 0000 | 3710.00 | 3750.3 | 1.1 | 0.1 | 13.6 | 3742.8 | 7.6 |
| 241 | 0000 1111 | 3725.63 | 3763.5 | -5.0 | 1.0 | 13.2 | 3758.6 | 4.9 |
| 242 | 0000 1110 | 3741.25 | 3771.1 | -0.0 | 1.0 | 7.6 | 3774.4 | -3.2 |
| 243 | 0000 1101 | 3756.88 | 3799.3 | -1.0 | -1.0 | 28.1 | 3790.2 | 9.1 |
| 244 | 0000 1100 | 3772.50 | 3809.4 | -0.1 | -1.0 | 10.1 | 3806.0 | 3.5 |
| 245 | 0000 1011 | 3788.13 | 3823.4 | 0.9 | 1.1 | 13.9 | 3821.8 | 1.6 |
| 246 | 0000 1010 | 3803.75 | 3840.0 | 1.0 | 1.1 | 16.6 | 3832.6 | 2.4 |
| 247 | 0000 1001 | 3819.38 | 3865.0 | -1.2 | 0.0 | 25.0 | 3853.4 | 11.6 |
| 248 | 0000 1000 | 3835.00 | 3877.0 | -1.2 | -1.1 | 12.0 | 3869.2 | 7.8 |
| 249 | 0000 0111 | 3850.63 | 3886.1 | 0.9 | 6.6 | 9.1 | 3885.0 | 1.1 |
| 250 | 0000 0110 | 3866.25 | 3901.5 | 1.0 | 1.1 | 15.4 | 3900.8 | 0.7 |
| 251 | 0000 0101 | 3881.88 | 3928.3 | -0.2 | 1.1 | 26.8 | 3916.6 | 11.7 |
| 252 | 0000 0100 | 3897.50 | 3946.6 | -1.2 | -1.1 | 18.3 | 3932.4 | 14.2 |
| 253 | 0000 0011 | 3913.13 | 3952.5 | -1.0 | -0.9 | 5.9 | 3948.2 | 4.4 |
| 254 | 0000 0010 | 3928.75 | 3975.1 | 0.8 | 0.0 | 22.6 | 3964.0 | 11.2 |
| 255 | 0000 0001 | 3944.38 | 3992.5 | 0.9 | 1.0 | 17.4 | 3979.8 | 12.8 |

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MS 106 - TEMPERATURE MONITOR UNIT TEST - MODEL 1, FILE 528.1 - PAGE 513
 1983-11-20 15:40:00 - PENULTIMATE TEST ACCEPTANCE - 0 AMPLITUDE MARGIN LOW BUS
 TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21
 TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21



THE FOLLOWING DATA ARE FOR INFORMATION ONLY
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TEST 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21

COEFFICIENT OF VARIATION OF TEST 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21

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TEST 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21

| MAXIMUM | THRESHOLD 1 | AVERAGE | MINIMUM | THRESHOLD 1 | STANDARD DEVIATION |
|---------|-------------|---------|---------|-------------|--------------------|
| 1.100 | 1.50 | 1.92000 | 1.600 | 1.91 | 4.22300 |

TEST 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21

| MAXIMUM | THRESHOLD 1 | AVERAGE | MINIMUM | THRESHOLD 1 | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 1.100 | 1.50 | -0.00000 | -1.100 | 1.91 | 1.78000 |

TEST 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21

| MAXIMUM | THRESHOLD 1 | AVERAGE | MINIMUM | THRESHOLD 1 | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 1.100 | 1.50 | -0.01000 | -1.100 | 1.91 | 1.77000 |

TEST 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21 - TEST NUMBER 1512-31 20/21

ORIGINAL PAGE 10
OF POOR QUALITY

HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 514
 1981/12/01 15:40:14 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 3.3.3.3.3.3.3 AND THRESHOLD TEST (HAND)= 2, SENSOR=1



| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | | | |
|----|------|------|---------|-------|------|------|------|-------|------|
| 1 | 1111 | 1111 | -24.375 | -36.3 | -1.9 | -0.7 | | -31.0 | -5.2 |
| 2 | 1111 | 1110 | -8.750 | -20.2 | -0.7 | -0.7 | 16.1 | -15.2 | -5.0 |
| 3 | 1111 | 1101 | 6.875 | 0.4 | 0.5 | -0.0 | 20.6 | 0.7 | -0.3 |
| 4 | 1111 | 1100 | 22.500 | 14.8 | 1.0 | 1.0 | 14.4 | 16.6 | -1.8 |
| 5 | 1111 | 1011 | 38.125 | 30.6 | -0.9 | -0.0 | 15.0 | 32.4 | -1.8 |
| 6 | 1111 | 1010 | 53.750 | 49.1 | -0.8 | -0.8 | 18.5 | 48.3 | 0.8 |
| 7 | 1111 | 1001 | 69.375 | 68.2 | -0.1 | -1.6 | 19.1 | 64.2 | 4.0 |
| 8 | 1111 | 1000 | 85.000 | 77.1 | 0.7 | 0.7 | 8.9 | 80.0 | -3.0 |
| 9 | 1111 | 0111 | 100.625 | 91.0 | 0.7 | 0.8 | 10.9 | 95.9 | -4.9 |
| 10 | 1111 | 0110 | 116.250 | 110.0 | -0.8 | 0.0 | 19.0 | 111.8 | -1.8 |
| 11 | 1111 | 0101 | 131.875 | 129.4 | -0.8 | -0.7 | 19.4 | 127.6 | 1.8 |
| 12 | 1111 | 0100 | 147.500 | 146.0 | 0.7 | 0.0 | 17.4 | 143.5 | 3.3 |
| 13 | 1111 | 0011 | 163.125 | 157.6 | 0.8 | 0.7 | 10.8 | 159.4 | -1.8 |
| 14 | 1111 | 0010 | 178.750 | 178.4 | -0.1 | 0.7 | 20.8 | 175.3 | 3.2 |
| 15 | 1111 | 0001 | 194.375 | 195.0 | -0.9 | -0.7 | 16.6 | 191.1 | 3.9 |
| 16 | 1111 | 0000 | 210.000 | 204.8 | -0.9 | -0.8 | 9.8 | 207.0 | -2.2 |
| 17 | 1110 | 1111 | 225.625 | 218.2 | 0.8 | 0.0 | 13.4 | 222.9 | -4.7 |
| 18 | 1110 | 1110 | 241.250 | 234.3 | 0.6 | 0.7 | 16.1 | 238.7 | -4.4 |
| 19 | 1110 | 1101 | 256.875 | 256.1 | -0.8 | -0.0 | 21.8 | 254.6 | 1.5 |
| 20 | 1110 | 1100 | 272.500 | 272.6 | -0.8 | -0.8 | 16.4 | 270.5 | 2.1 |
| 21 | 1110 | 1011 | 288.125 | 285.6 | 0.0 | -0.8 | 17.0 | 286.3 | -0.7 |
| 22 | 1110 | 1010 | 303.750 | 303.6 | 0.7 | 0.7 | 18.0 | 302.2 | 1.4 |
| 23 | 1110 | 1001 | 319.375 | 322.3 | 0.9 | 1.0 | 18.7 | 318.1 | 4.3 |
| 24 | 1110 | 1000 | 335.000 | 337.9 | -1.0 | -0.0 | 15.5 | 333.9 | 4.0 |
| 25 | 1110 | 0111 | 350.625 | 346.8 | -0.8 | -0.8 | 8.9 | 349.6 | -3.0 |

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HIS-2... THERMATIC DARTER NOX UNIT TEST MODEL... F11, S/N 3 PAGE 515
 1981/12/01 15:40:14 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 PR... THRESHOLD ID TEST SIGNID= 12 SENSOR=1

HAC
 TEST
 527

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 25 1110 0110 | 366.250 | 364.4 | 0.6 | -0.0 | 17.6 | 365.7 | -1.3 |
| 26 1110 0101 | 381.875 | 383.6 | 0.6 | 0.6 | 19.2 | 381.5 | 2.0 |
| 27 1110 0100 | 397.500 | 404.0 | -0.1 | 0.9 | 20.4 | 397.4 | 6.6 |
| 28 1110 0011 | 413.125 | 413.2 | -0.9 | -0.8 | 9.2 | 413.3 | -0.1 |
| 29 1110 0010 | 428.750 | 434.1 | -0.8 | 0.2 | 20.9 | 429.1 | 5.0 |
| 30 1110 0001 | 444.375 | 448.9 | 0.8 | 0.0 | 14.8 | 445.0 | 3.9 |
| 31 1110 0000 | 460.000 | 456.2 | 0.2 | 0.8 | 7.3 | 460.9 | -4.7 |
| 32 1101 1111 | 475.625 | 474.4 | -0.8 | -0.0 | 18.2 | 476.8 | -2.3 |
| 33 1101 1110 | 491.250 | 490.0 | -0.9 | 0.9 | 15.5 | 492.6 | -2.7 |
| 34 1101 1101 | 506.875 | 511.3 | -0.0 | -0.2 | 21.3 | 508.5 | 2.8 |
| 35 1101 1100 | 522.500 | 524.3 | 0.8 | 0.8 | 13.0 | 524.4 | -0.0 |
| 36 1101 1011 | 538.125 | 540.1 | 0.8 | 0.8 | 15.8 | 540.2 | -0.1 |
| 37 1101 1010 | 553.750 | 558.8 | -0.2 | 0.0 | 19.7 | 556.1 | 2.7 |
| 38 1101 1001 | 569.375 | 578.6 | -0.9 | -0.9 | 19.7 | 572.0 | 6.6 |
| 39 1101 1000 | 585.000 | 589.3 | 0.6 | 0.0 | 10.7 | 587.8 | 1.4 |
| 40 1101 0111 | 600.625 | 601.2 | 0.2 | 0.2 | 11.9 | 603.7 | -2.5 |
| 41 1101 0110 | 616.250 | 618.9 | -0.1 | 0.2 | 12.2 | 619.6 | -0.2 |
| 42 1101 0101 | 631.875 | 639.2 | -0.8 | -0.8 | 20.3 | 635.4 | 3.8 |
| 43 1101 0100 | 647.500 | 656.5 | -0.8 | -0.8 | 17.3 | 651.3 | 5.2 |
| 44 1101 0011 | 663.125 | 667.4 | 0.2 | 3.1 | 10.9 | 667.2 | 0.3 |
| 45 1101 0010 | 678.750 | 687.6 | 0.2 | 0.2 | 20.1 | 684.0 | 4.5 |
| 46 1101 0001 | 694.375 | 705.5 | -1.8 | -0.1 | 17.9 | 698.9 | 6.6 |
| 47 1101 0000 | 710.000 | 717.5 | -0.8 | -0.9 | 12.1 | 714.8 | 2.8 |
| 48 1100 1111 | 725.625 | 728.2 | -0.0 | -0.2 | 10.2 | 730.2 | -2.4 |
| 49 1100 1110 | 741.250 | 743.3 | 0.2 | 0.2 | 15.0 | 744.2 | -3.3 |
| 50 1100 1101 | 756.875 | 764.3 | 0.2 | 0.6 | 21.1 | 762.4 | 2.0 |

ORIGINAL PAGE 18
 OF POOR QUALITY

HS-216 THERMATIC WATER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 516

1981/12/01 15:40:14 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

3-11-11-11-11 A/D THRESHOLD TEST CHAND= 2> SENSOR=1



| THRESHOLD A/D OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | REMARK |
|--|------------------------|---------------------------|------------------------|-------|------------------------------------|------------------------|-----------|--------|
| | | NOMINAL | LEVELS RATIO-
LOWER | UPPER | | POINT | DEVIATION | |
| 52 | 1100 1100 | 772.500 | 781.1 | -0.8 | 0.0 | 16.7 | 778.3 | 2.8 |
| 53 | 1100 1011 | 788.125 | 794.7 | -0.9 | -0.9 | 13.6 | 794.1 | 0.5 |
| 54 | 1100 1010 | 803.750 | 811.8 | 0.7 | 0.0 | 17.1 | 810.0 | 1.8 |
| 55 | 1100 1001 | 819.375 | 831.1 | 0.8 | 0.8 | 19.3 | 825.9 | 5.2 |
| 56 | 1100 1000 | 835.000 | 848.6 | 0.0 | 0.8 | 17.5 | 841.7 | 6.8 |
| 57 | 1100 0111 | 850.625 | 855.2 | -0.8 | -0.8 | 6.6 | 857.6 | -2.4 |
| 58 | 1100 0110 | 866.250 | 872.8 | -0.7 | -0.8 | 17.6 | 873.5 | -0.6 |
| 59 | 1100 0101 | 881.875 | 891.5 | 0.7 | 0.0 | 18.6 | 889.3 | 7.1 |
| 60 | 1100 0100 | 897.500 | 911.3 | 0.8 | 0.8 | 19.8 | 905.2 | 6.0 |
| 61 | 1100 0011 | 913.125 | 921.0 | -0.8 | -0.0 | 9.8 | 921.1 | -0.0 |
| 62 | 1100 0010 | 928.750 | 941.3 | -0.8 | -0.8 | 20.2 | 936.9 | 4.7 |
| 63 | 1100 0001 | 944.375 | 958.2 | 0.0 | -0.9 | 16.9 | 952.8 | 5.4 |
| 64 | 1100 0000 | 960.000 | 964.3 | 0.9 | 0.8 | 6.1 | 968.7 | -4.4 |
| 65 | 1011 1111 | 975.625 | 982.5 | 0.7 | 0.7 | 18.2 | 984.5 | -2.0 |
| 66 | 1011 1110 | 991.250 | 998.5 | -0.7 | 0.0 | 15.9 | 1000.4 | -2.0 |
| 67 | 1011 1101 | 1006.88 | 1020.1 | -0.6 | -0.6 | 21.6 | 1016.3 | 3.8 |
| 68 | 1011 1100 | 1022.50 | 1031.7 | 1.6 | 0.0 | 11.6 | 1032.2 | -0.4 |
| 69 | 1011 1011 | 1038.13 | 1048.5 | 0.8 | 0.9 | 16.7 | 1048.0 | 0.5 |
| 70 | 1011 1010 | 1053.75 | 1066.3 | -0.8 | 0.7 | 17.8 | 1063.9 | 2.4 |
| 71 | 1011 1001 | 1069.38 | 1086.7 | -0.8 | -0.9 | 20.4 | 1079.8 | 7.0 |
| 72 | 1011 1000 | 1085.00 | 1095.1 | -0.7 | -0.8 | 8.4 | 1095.6 | -0.5 |
| 73 | 1011 0111 | 1100.63 | 1109.1 | 0.8 | -0.0 | 14.0 | 1111.5 | -2.4 |
| 74 | 1011 0110 | 1116.25 | 1126.5 | 0.8 | 0.8 | 17.4 | 1127.4 | -0.8 |
| 75 | 1011 0101 | 1131.88 | 1147.1 | -0.8 | 0.0 | 20.6 | 1143.2 | 3.9 |
| 76 | 1011 0100 | 1147.50 | 1163.8 | -0.7 | -0.7 | 16.7 | 1159.1 | 4.7 |
| 77 | 1011 0011 | 1163.13 | 1175.7 | 0.0 | -0.8 | 11.9 | 1175.0 | 0.7 |
| 78 | 1011 0010 | 1178.75 | 1195.0 | 0.7 | 0.6 | 19.3 | 1190.8 | 4.2 |

ORIGINAL PAGE IS
OF POOR QUALITY

1.4 AUTOMATIC MASTER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 517

11/12/01 15:40:14 FLUENCY TEST ACCEPTANCE PARAMETER VOLTAGE MARGIN LOW BUS

11/14/01 15:41:11 FLUENCY TEST THRESHOLD TEST CRITERIA= 2% SENSITIVITY=1

HAC
TCT
527

| SCHED A/D OUTPUT
REFR THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|------------------------------------|------------------------|---------------------------|--------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 79 | 1011 0001 | 1194.38 | 1212.2 | 0.8 | 0.8 | 1205.7 | 5.5 |
| 80 | 1011 0000 | 1210.00 | 1223.0 | -1.3 | 0.0 | 1222.6 | 0.5 |
| 81 | 1010 1111 | 1235.63 | 1235.7 | -0.8 | -0.8 | 1236.4 | -2.7 |
| 82 | 1010 1110 | 1251.25 | 1250.4 | 0.7 | -0.0 | 1254.3 | -3.9 |
| 83 | 1010 1101 | 1265.88 | 1271.8 | 0.6 | 0.5 | 1270.2 | 1.7 |
| 84 | 1010 1100 | 1272.50 | 1286.6 | 0.0 | 0.8 | 1286.1 | 0.6 |
| 85 | 1010 1011 | 1288.13 | 1301.7 | -0.8 | -0.8 | 1301.9 | -0.2 |
| 86 | 1010 1010 | 1303.75 | 1319.4 | -0.6 | -0.7 | 1317.8 | 1.6 |
| 87 | 1010 1001 | 1319.38 | 1338.1 | 0.8 | -0.0 | 1333.7 | 4.4 |
| 88 | 1010 1000 | 1335.00 | 1352.5 | 0.9 | 0.8 | 1349.5 | 3.0 |
| 89 | 1010 0111 | 1350.63 | 1362.2 | -0.8 | -0.0 | 1365.4 | -3.2 |
| 90 | 1010 0110 | 1365.25 | 1379.7 | -0.8 | -0.8 | 1381.3 | -1.5 |
| 91 | 1010 0101 | 1380.88 | 1399.3 | -0.0 | -0.8 | 1397.1 | 2.1 |
| 92 | 1010 0100 | 1392.50 | 1417.4 | 0.9 | 0.8 | 1413.0 | 4.4 |
| 93 | 1010 0011 | 1413.13 | 1427.1 | 0.8 | 0.8 | 1428.9 | -1.7 |
| 94 | 1010 0010 | 1433.75 | 1448.0 | -0.8 | 0.0 | 1459.7 | 3.2 |
| 95 | 1010 0001 | 1444.38 | 1465.1 | -0.8 | 0.8 | 1460.6 | 4.5 |
| 96 | 1010 0000 | 1460.00 | 1474.3 | 0.7 | 0.1 | 1476.5 | -2.2 |
| 97 | 1001 1111 | 1475.63 | 1487.8 | 0.7 | 0.7 | 1492.3 | -4.5 |
| 98 | 1001 1110 | 1491.25 | 1502.7 | -0.0 | 0.7 | 1508.2 | -5.6 |
| 99 | 1001 1101 | 1506.88 | 1525.1 | 0.7 | -0.8 | 1524.1 | 1.1 |
| 0 | 1001 1100 | 1522.50 | 1537.6 | -0.7 | 0.7 | 1549.0 | -2.4 |
| 01 | 1001 1011 | 1538.13 | 1553.8 | 0.8 | 0.0 | 1555.8 | -2.0 |
| 02 | 1001 1010 | 1553.75 | 1570.9 | 0.8 | 0.8 | 1571.7 | -0.8 |
| 03 | 1001 1001 | 1569.38 | 1591.8 | -0.8 | 0.0 | 1587.6 | 4.2 |
| 04 | 1001 1000 | 1585.00 | 1602.3 | -0.8 | -0.7 | 1603.4 | -1.1 |

ORIGINAL PAGE 18
OF POOR QUALITY

36 THERMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 518

/12/01 15:40:14 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

1.3.1-4 AND THRESHOLD TEST (COND= 2, SENSOR=1)



| HOLD A/D OUTPUT
REF THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | |
|----------------------------------|------------------------|---------------------------|--------|-------|------------------------------------|------------------------|-----------|--------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION | 0.0181 |
| 5 | 1001 0111 | 1600.63 | 1615.1 | -0.1 | -0.8 | 12.9 | 1619.3 | -4.1 |
| 6 | 1001 0110 | 1616.25 | 1631.3 | 0.7 | 0.7 | 16.2 | 1635.2 | -3.8 |
| 7 | 1001 0101 | 1631.88 | 1651.2 | 0.7 | 0.7 | 19.9 | 1651.0 | 0.2 |
| 8 | 1001 0100 | 1647.50 | 1668.0 | -0.8 | -0.0 | 16.7 | 1666.9 | 1.1 |
| 9 | 1001 0011 | 1663.13 | 1680.9 | -0.8 | -0.9 | 12.9 | 1687.8 | -1.9 |
| 0 | 1001 0010 | 1678.75 | 1699.6 | 0.7 | -0.0 | 18.7 | 1698.6 | 1.0 |
| 1 | 1001 0001 | 1694.38 | 1717.1 | 0.8 | 0.8 | 17.5 | 1714.5 | 2.6 |
| 2 | 1001 0000 | 1710.00 | 1734.3 | 0.0 | 0.8 | 17.2 | 1730.4 | 3.9 |
| 3 | 1000 1111 | 1725.63 | 1740.9 | -0.9 | -1.0 | 6.6 | 1746.2 | -5.3 |
| 4 | 1000 1110 | 1741.25 | 1755.7 | -0.8 | -0.8 | 14.7 | 1762.1 | -6.5 |
| 5 | 1000 1101 | 1756.88 | 1776.5 | 0.6 | 0.7 | 20.9 | 1778.0 | -1.4 |
| 6 | 1000 1100 | 1772.50 | 1791.2 | 0.8 | 0.8 | 14.7 | 1793.8 | -2.6 |
| 7 | 1000 1011 | 1788.13 | 1806.7 | -0.8 | -0.1 | 15.4 | 1809.7 | -3.1 |
| 8 | 1000 1010 | 1803.75 | 1824.0 | -0.8 | -0.8 | 12.3 | 1825.6 | -1.6 |
| 9 | 1000 1001 | 1819.38 | 1843.7 | 0.1 | -0.8 | 19.7 | 1841.5 | 2.2 |
| 0 | 1000 1000 | 1835.00 | 1860.2 | 0.8 | 0.7 | 16.5 | 1857.3 | 2.9 |
| 1 | 1000 0111 | 1850.63 | 1866.4 | 0.7 | 0.7 | 6.2 | 1873.2 | -6.8 |
| 2 | 1000 0110 | 1866.25 | 1884.2 | -0.8 | -0.8 | 12.8 | 1889.1 | -4.9 |
| 3 | 1000 0101 | 1881.88 | 1903.9 | -0.7 | -0.7 | 19.7 | 1904.9 | -1.1 |
| 4 | 1000 0100 | 1897.50 | 1921.7 | 0.9 | 0.1 | 12.8 | 1920.8 | 0.9 |
| 5 | 1000 0011 | 1913.13 | 1932.0 | 0.8 | 0.8 | 10.3 | 1936.7 | -4.7 |
| 6 | 1000 0010 | 1928.75 | 1951.6 | 0.0 | 0.7 | 19.6 | 1952.5 | -0.9 |
| 7 | 1000 0001 | 1944.38 | 1969.8 | -0.8 | -0.8 | 18.2 | 1968.4 | 1.4 |
| 8 | 1000 0000 | 1960.00 | 1985.1 | -0.8 | -0.9 | 15.2 | 1984.3 | 0.8 |
| 9 | 0111 1111 | 1975.63 | 1995.6 | 0.8 | 0.8 | 10.5 | 2000.1 | -4.6 |
| 0 | 0111 1110 | 1991.25 | 2012.0 | 0.8 | 0.8 | 16.4 | 2016.0 | -4.0 |

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OF POOR QUALITY

14 THERMATIC MAPPER MAX UNIT TEST MODEL.. FTL S/N 3 PAGE 519

17201 15:40:14 DENSITY TEST ACCEPTANCE W AMBIENT VOLTAGE MARGIN LOW BUS

17201 15:40:14 DENSITY TEST ACCEPTANCE W AMBIENT VOLTAGE MARGIN LOW BUS SENSORS=1



| POINT | X/D OUTPUT | THRESHOLD | DIGITAL
VOLTAGE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|-------|------------|-----------|----------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 1 | 0111 | 1101 | 2005.88 | 2033.9 | -0.7 | -0.0 | 21.9 | 2031.9 | 2.0 |
| 2 | 0111 | 1100 | 2022.50 | 2047.5 | -0.9 | 0.8 | 13.6 | 2047.7 | -0.2 |
| 3 | 0111 | 1011 | 2040.13 | 2062.2 | 0.0 | -0.8 | 14.7 | 2063.6 | -1.4 |
| 4 | 0111 | 1010 | 2053.75 | 2080.2 | 0.8 | 0.7 | 18.0 | 2079.5 | 0.8 |
| 5 | 0111 | 1001 | 2069.38 | 2098.7 | 0.7 | 0.7 | 18.4 | 2095.4 | 3.3 |
| 6 | 0111 | 1000 | 2085.00 | 2110.2 | -1.3 | -1.0 | 11.5 | 2111.2 | -1.0 |
| 7 | 0111 | 0111 | 2100.63 | 2123.0 | -0.8 | -0.9 | 12.8 | 2127.1 | -4.1 |
| 8 | 0111 | 0110 | 2116.25 | 2140.8 | 0.7 | -0.1 | 17.8 | 2143.0 | -2.2 |
| 9 | 0111 | 0101 | 2131.88 | 2159.5 | 0.8 | 0.8 | 18.7 | 2158.8 | 0.7 |
| 10 | 0111 | 0100 | 2147.50 | 2178.5 | 0.0 | 0.5 | 18.9 | 2174.7 | 3.8 |
| 11 | 0111 | 0011 | 2163.13 | 2188.8 | -0.8 | -1.8 | 10.3 | 2190.6 | -1.8 |
| 12 | 0111 | 0010 | 2178.75 | 2209.8 | -0.7 | -0.8 | 21.1 | 2205.4 | 3.4 |
| 13 | 0111 | 0001 | 2194.38 | 2224.5 | 1.2 | 0.9 | 14.7 | 2222.3 | 2.2 |
| 14 | 0111 | 0000 | 2210.00 | 2238.4 | 0.7 | 0.8 | 13.9 | 2238.2 | 0.3 |
| 15 | 0110 | 1111 | 2225.63 | 2249.0 | -0.8 | -0.0 | 10.5 | 2254.0 | -5.1 |
| 16 | 0110 | 1110 | 2241.25 | 2265.5 | -0.6 | 0.8 | 16.5 | 2269.9 | -4.1 |
| 17 | 0110 | 1101 | 2256.88 | 2286.3 | 0.0 | 0.8 | 20.8 | 2285.8 | 0.5 |
| 18 | 0110 | 1100 | 2272.50 | 2301.6 | 0.3 | 0.8 | 15.3 | 2301.6 | -0.1 |
| 19 | 0110 | 1011 | 2288.13 | 2314.0 | 0.8 | 0.7 | 12.4 | 2317.5 | -3.5 |
| 20 | 0110 | 1010 | 2303.75 | 2333.6 | -0.8 | 3.2 | 19.5 | 2333.4 | 0.2 |
| 21 | 0110 | 1001 | 2319.38 | 2352.2 | -0.9 | -0.9 | 13.6 | 2349.2 | 2.9 |
| 22 | 0110 | 1000 | 2335.00 | 2366.6 | 1.0 | 0.1 | 14.4 | 2365.1 | 1.5 |
| 23 | 0110 | 0111 | 2350.63 | 2374.5 | 0.8 | 0.9 | 7.9 | 2381.0 | -6.4 |
| 24 | 0110 | 0110 | 2366.25 | 2393.3 | -0.1 | 0.7 | 18.7 | 2396.9 | -3.6 |
| 25 | 0110 | 0101 | 2381.88 | 2412.9 | -0.9 | -0.8 | 19.6 | 2412.7 | 0.2 |
| 26 | 0110 | 0100 | 2397.50 | 2436.1 | -0.7 | -0.6 | 23.1 | 2428.6 | 7.5 |
| 27 | 0110 | 0011 | 2413.13 | 2440.2 | 0.8 | 0.8 | 4.1 | 2444.5 | -4.2 |

ORIGINAL PAGE 19
OF POOR QUALITY

36 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 520
 7/12/01 15:40:14 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 1-3-5-4 A/D THRESHOLD TEST (CHAN= 2, SENSOR=1)



00101

| HOLD A/D OUTPUT
-FR THRESHOLD | TOTAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|----------------------------------|------------------------|---------------------------|------------------------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LEVELS RATIO-
LOWER | UPPER | | POINT | DEVIATION |
| 3 0110 0010 | 2428.75 | 2461.5 | 0.7 | 0.7 | 21.3 | 2460.3 | 1.2 |
| 2 0110 0001 | 2444.38 | 2478.1 | -0.8 | -0.0 | 16.6 | 2476.2 | 1.9 |
| 1 0110 0000 | 2460.00 | 2487.1 | -0.8 | -0.8 | 9.0 | 2492.1 | -5.0 |
| 0101 1111 | 2475.63 | 2502.0 | -0.1 | -0.8 | 14.9 | 2507.9 | -6.0 |
| 0101 1110 | 2491.25 | 2517.2 | 0.8 | 0.8 | 15.2 | 2523.8 | -6.6 |
| 0101 1101 | 2506.88 | 2538.5 | 0.7 | 0.7 | 21.3 | 2539.7 | -1.2 |
| 0101 1100 | 2522.50 | 2552.9 | -0.7 | -0.7 | 14.4 | 2555.5 | -2.6 |
| 0101 1011 | 2538.13 | 2567.8 | -0.8 | -0.9 | 14.9 | 2571.4 | -3.6 |
| 0101 1010 | 2553.75 | 2585.3 | 0.7 | 0.1 | 17.5 | 2587.3 | -2.0 |
| 0101 1001 | 2569.38 | 2604.6 | 0.8 | 0.8 | 19.3 | 2603.1 | 1.4 |
| 0101 1000 | 2585.00 | 2616.2 | -0.1 | 0.7 | 11.6 | 2619.0 | -2.8 |
| 0101 0111 | 2600.63 | 2628.6 | -0.8 | -0.9 | 12.4 | 2634.9 | -6.2 |
| 0101 0110 | 2616.25 | 2646.6 | -0.8 | -0.9 | 17.9 | 2650.8 | -4.2 |
| 0101 0101 | 2631.88 | 2665.1 | 0.8 | 0.8 | 18.6 | 2666.6 | -1.5 |
| 0101 0100 | 2647.50 | 2684.8 | -1.6 | 0.6 | 19.7 | 2682.5 | 2.7 |
| 0101 0011 | 2663.13 | 2694.2 | -0.8 | 0.0 | 9.4 | 2698.4 | -4.2 |
| 0101 0010 | 2678.75 | 2714.9 | -0.8 | -0.8 | 20.6 | 2714.2 | 0.6 |
| 0101 0001 | 2694.38 | 2731.7 | -0.1 | -0.9 | 16.8 | 2730.1 | 1.6 |
| 0101 0000 | 2710.00 | 2748.1 | 0.8 | 0.8 | 16.4 | 2746.0 | 2.1 |
| 0100 1111 | 2725.63 | 2753.7 | -0.0 | 0.7 | 5.7 | 2761.8 | -8.1 |
| 0100 1110 | 2741.25 | 2770.4 | -0.8 | -0.8 | 16.7 | 2777.7 | -7.3 |
| 0100 1101 | 2756.88 | 2791.6 | -0.7 | -0.7 | 21.2 | 2793.6 | -1.9 |
| 0100 1100 | 2772.50 | 2806.6 | 0.8 | 0.0 | 15.0 | 2809.4 | -2.8 |
| 0100 1011 | 2788.13 | 2819.6 | 0.8 | 0.8 | 13.0 | 2825.3 | -5.7 |
| 0100 1010 | 2803.75 | 2837.9 | -0.0 | 0.7 | 18.7 | 2841.2 | -3.3 |
| 0100 1001 | 2819.38 | 2858.0 | -0.9 | -0.8 | 20.1 | 2857.0 | 0.9 |

ORIGINAL PAGE IS
OF POOR QUALITY

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TH

LOGIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 523
 15:40:14 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 5--14 2413 774021 544000 10 774021 544000 10 2413 774021 544000 10 2413 774021 544000 10

HAC
 TEST
 527

HS-2
 1981
 78.7

DEC 01 '81

| ID OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | THRESH
NUM |
|------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|---------------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION | |
| 01 0011 | 3553.13 | 3714.0 | 0.7 | 0.8 | 9.6 | 3713.9 | 0.1 | 15 |
| 01 0010 | 3678.75 | 3734.4 | -0.1 | 0.8 | 20.4 | 3729.8 | 4.6 | 15 |
| 01 0001 | 3694.38 | 3752.9 | -0.9 | -0.9 | 18.5 | 3745.7 | 7.2 | 16 |
| 01 0000 | 3710.00 | 3772.6 | -0.1 | -0.8 | 19.6 | 3761.6 | 11.0 | 16 |
| 00 1111 | 3725.63 | 3775.1 | 0.9 | 0.9 | 2.6 | 3777.4 | 2.3 | 16 |
| 00 1110 | 3741.25 | 3791.1 | 0.7 | 0.8 | 16.0 | 3799.3 | -2.2 | 16 |
| 00 1101 | 3756.88 | 3813.8 | -0.8 | -0.0 | 22.7 | 3809.2 | 4.7 | 16 |
| 00 1100 | 3772.50 | 3828.8 | -1.0 | -0.8 | 14.9 | 3825.0 | 3.8 | 16 |
| 00 1011 | 3788.13 | 3843.3 | -0.1 | -0.8 | 14.5 | 3830.9 | 2.4 | 16 |
| 00 1010 | 3803.75 | 3860.6 | 0.8 | 0.9 | 17.3 | 3856.8 | 3.8 | 16 |
| 00 1001 | 3819.38 | 3880.4 | -0.1 | 3.9 | 19.8 | 3872.6 | 7.8 | 16 |
| 00 1000 | 3835.00 | 3902.0 | -1.1 | 3.9 | 21.6 | 3888.5 | 13.5 | 16 |
| 00 0111 | 3850.63 | 3905.1 | -0.8 | -1.0 | 3.1 | 3904.4 | 0.8 | 17 |
| 00 0110 | 3866.25 | 3922.3 | 0.7 | -0.1 | 17.1 | 3920.2 | 2.0 | 17 |
| 00 0101 | 3881.88 | 3942.0 | 0.6 | 0.8 | 19.7 | 3936.1 | 5.9 | 17 |
| 00 0100 | 3897.50 | 3961.6 | -0.1 | 0.9 | 19.6 | 3952.0 | 9.7 | 17 |
| 00 0011 | 3913.13 | 3972.2 | 1.0 | -0.9 | 10.5 | 3967.8 | 4.3 | 17 |
| 00 0010 | 3928.75 | 3992.5 | -0.1 | -0.7 | 20.4 | 3983.7 | 8.8 | 17 |
| 00 0001 | 3944.38 | 4009.3 | 0.7 | 0.8 | 16.8 | 3999.6 | 9.8 | 17 |

ORIGINAL PAGE IS
 OF POOR QUALITY

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 17
 17
 18
 18
 18
 18

HEMATIC MAIPR MUX UNIT TEST MODEL.. FIT. S/N 3 PAGE 524

15:46:37 FINALITY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

5-8 AND THRESHOLD TEST COND= 3, SENSOR=1
S U M M A R Y

IS ERROR, 2) THRESHOLD INCREMENT(+/- 0.0 - THRESH INC = 31.2)
NO DATA ARE FOR INFORMATION ONLY

DC0181

HS-236
1981/11
9-5-1

THRESHOLD
NUMBER

FIT STRAIGHT LINE DIS Y -15.435X -50.4MV

TON OF SLOPE FROM IDEAL IS: 1.341%

IS:-50.4MV

IENT OF DETERMINATION IS: RXX2= .99998720

INPUT DURING DC RESTORE IS:64.2MV

ERROR - 4.374MV REGRY: RMS ERROR -C=7.812MV

THRESHOLD DETERMINATION MEANS DETERMINATION

| THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|-------------|----------|---------|-------------|--------------------|
| 243 | 15.901MV | 2.2MV | 224 | 5.529MV |

R I T A T I O N A T I N T H R E S H O L D L E V E L S R A T I O = 1 ± 1

| THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|-------------|----------|---------|-------------|--------------------|
| 128 | -0.048MV | -2.8MV | 188 | .470MV |

R I T A T I O N A T I N T H R E S H O L D L E V E L S R A T I O = 1 ± 1

| THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|-------------|---------|---------|-------------|--------------------|
| 87 | 0.918MV | -0.7MV | 247 | .474MV |

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HS-200 THERMATIC METER BOX UNIT TEST MODEL 11, 111, 1111 PAGE 527

1981 11/20 15:46:11 THERMATIC TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN FOR EHS

11/20/81 15:46:11 11/20/81 15:46:11 11/20/81 15:46:11 11/20/81 15:46:11 11/20/81 15:46:11

HAC
TEST
527

0001

| THERMATIC
NUMBER | AZIS
THERMATIC | THERMATIC
NUMBER | THERMATIC
VALUE
(KΩ) | ANALOG INPUT VOLTAGE
THERMATIC RATIO | | INCREASE
FROM THERMATIC
THERMATIC | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------|---------------------|----------------------------|---|-------|---|------------------------|-----------|
| | | | | NOMINAL | LOWER | | POINT | DEVIATION |
| 11 | 1100 | 1100 | 772.500 | 773.5 | -0.5 | 0.4 | 773.0 | 2.5 |
| 11 | 1100 | 1011 | 788.125 | 789.8 | 0.5 | -0.0 | 788.8 | 1.0 |
| 11 | 1100 | 1010 | 803.250 | 804.9 | 0.3 | 0.3 | 804.6 | 0.3 |
| 11 | 1100 | 1001 | 819.375 | 820.9 | -0.4 | 0.0 | 820.5 | 5.4 |
| 11 | 1100 | 1000 | 835.500 | 837.0 | -0.5 | -0.4 | 836.3 | 5.7 |
| 11 | 1100 | 0111 | 850.625 | 850.7 | 0.1 | 0.5 | 852.1 | -1.4 |
| 11 | 1100 | 0110 | 865.750 | 865.1 | 0.4 | 0.3 | 868.0 | -2.8 |
| 11 | 1100 | 0101 | 881.875 | 883.5 | 0.5 | 0.4 | 883.8 | 2.7 |
| 11 | 1100 | 0100 | 897.500 | 906.2 | -0.5 | 3.0 | 899.6 | 6.5 |
| 11 | 1100 | 0011 | 913.125 | 915.8 | -0.4 | -0.5 | 915.5 | 0.4 |
| 11 | 1100 | 0010 | 928.250 | 933.4 | 0.3 | -0.1 | 931.3 | 2.1 |
| 11 | 1100 | 0001 | 944.375 | 951.5 | 0.4 | 0.4 | 947.1 | 4.4 |
| 11 | 1100 | 0000 | 960.500 | 957.7 | -0.1 | 0.5 | 963.0 | -5.1 |
| 11 | 1011 | 1111 | 975.625 | 979.2 | -0.4 | -0.4 | 978.8 | 0.4 |
| 11 | 1011 | 1110 | 991.750 | 991.9 | -0.3 | 0.5 | 994.6 | -2.8 |
| 11 | 1011 | 1101 | 1006.875 | 1017.2 | 0.6 | 3.1 | 1010.5 | 6.7 |
| 11 | 1011 | 1100 | 1022.500 | 1025.7 | 0.4 | 0.4 | 1026.3 | -0.4 |
| 11 | 1011 | 1011 | 1038.125 | 1044.7 | -0.5 | 0.6 | 1042.1 | 2.5 |
| 11 | 1011 | 1010 | 1053.250 | 1060.3 | -0.5 | 0.4 | 1058.0 | 2.4 |
| 11 | 1011 | 1001 | 1069.375 | 1080.7 | -0.0 | -0.4 | 1073.8 | 6.8 |
| 11 | 1011 | 1000 | 1085.500 | 1087.1 | 0.4 | 0.4 | 1089.6 | -2.5 |
| 11 | 1011 | 0111 | 1100.625 | 1104.9 | 0.4 | 0.4 | 1105.5 | -0.6 |
| 11 | 1011 | 0110 | 1116.750 | 1120.1 | -0.4 | 0.0 | 1121.3 | -1.2 |
| 11 | 1011 | 0101 | 1131.875 | 1142.8 | -0.5 | -0.5 | 1137.1 | 5.6 |
| 11 | 1011 | 0100 | 1147.500 | 1156.4 | 0.5 | 0.0 | 1153.0 | 3.4 |
| 11 | 1011 | 0011 | 1163.125 | 1169.7 | 0.4 | 0.5 | 1168.8 | 0.9 |
| 11 | 1011 | 0010 | 1178.250 | 1187.8 | -0.0 | 0.3 | 1184.7 | 3.1 |

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HS-236 THERMATIC MAPPER MIX UNIT TEST MODEL.. FUL. S/N 3 PAGE 528
 1981/12/01 15:46:51 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 3.11.11.5-14 AND THRESHOLD TEST (RAND= 3, SENSOR=1)

HAC
 TEST
 S27

010101

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|------------------------|---------------------------|------------------------|--------------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LEVELS RATIO-
LOWER | 1:1
UPPER | | POINT | DEVIATION |
| 79 | 1011 0001 | 1194.38 | 1206.7 | -0.4 | -0.3 | 1200.5 | 6.3 |
| 80 | 1011 0000 | 1210.00 | 1217.4 | -0.6 | -0.5 | 1216.3 | 1.1 |
| 81 | 1010 1111 | 1225.63 | 1230.3 | 0.3 | -0.0 | 1232.2 | -1.9 |
| 82 | 1010 1110 | 1241.25 | 1243.0 | 0.3 | 0.4 | 1248.0 | -4.9 |
| 83 | 1010 1101 | 1256.88 | 1268.9 | -0.5 | 0.2 | 1263.8 | 5.1 |
| 84 | 1010 1100 | 1272.50 | 1280.8 | -0.6 | -0.6 | 1279.7 | 1.2 |
| 85 | 1010 1011 | 1288.13 | 1296.2 | -0.0 | -0.5 | 1295.5 | 0.7 |
| 86 | 1010 1010 | 1303.75 | 1311.0 | 0.4 | 0.3 | 1311.3 | -0.3 |
| 87 | 1010 1001 | 1319.38 | 1331.4 | 0.4 | 3.0 | 1327.2 | 4.2 |
| 88 | 1010 1000 | 1335.00 | 1344.2 | -0.5 | -0.1 | 1343.0 | 1.2 |
| 89 | 1010 0111 | 1350.63 | 1356.5 | -0.4 | -0.4 | 1358.8 | -2.4 |
| 90 | 1010 0110 | 1366.25 | 1371.0 | 0.4 | -0.1 | 1374.7 | -3.6 |
| 91 | 1010 0101 | 1381.88 | 1393.4 | 0.5 | 0.4 | 1390.5 | 2.9 |
| 92 | 1010 0100 | 1397.50 | 1410.3 | -0.0 | 0.6 | 1406.3 | 4.0 |
| 93 | 1010 0011 | 1413.13 | 1421.4 | -0.5 | -0.5 | 1422.2 | -0.8 |
| 94 | 1010 0010 | 1428.75 | 1439.3 | -0.3 | -0.4 | 1438.0 | 1.4 |
| 95 | 1010 0001 | 1444.38 | 1457.4 | 0.4 | -0.0 | 1453.8 | 3.5 |
| 96 | 1010 0000 | 1460.00 | 1463.0 | 0.4 | 0.5 | 1469.7 | -6.7 |
| 97 | 1001 1111 | 1475.63 | 1483.2 | -0.4 | 0.0 | 1485.5 | -2.3 |
| 98 | 1001 1110 | 1491.25 | 1495.5 | -0.5 | -0.4 | 1501.3 | -5.9 |
| 99 | 1001 1101 | 1506.88 | 1521.2 | 0.0 | -0.4 | 1517.2 | 4.0 |
| 100 | 1001 1100 | 1522.50 | 1529.5 | 0.5 | 0.5 | 1533.0 | -3.5 |
| 101 | 1001 1011 | 1538.13 | 1548.2 | 0.4 | 0.8 | 1548.8 | -0.2 |
| 102 | 1001 1010 | 1553.75 | 1563.5 | -0.5 | -0.1 | 1564.7 | -1.2 |
| 103 | 1001 1001 | 1569.38 | 1587.2 | -0.4 | -0.5 | 1580.5 | 6.7 |
| 104 | 1001 1000 | 1585.00 | 1593.2 | 0.4 | -0.1 | 1594.3 | -3.2 |

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IS-216 THIRMAIC MOWER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 532

901/12/01 15:46:51 FINALITY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

--- 13.1 --- 24 AND THRESHOLD TEST CHAND-- 13. SENSOR=1



| RE
NUMBER | A/D
THRESHOLD | O/D
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--------------|------------------|------------------|------------------------|---------------------------|-------------------------|----------------|------------------------------------|------------------------|-----------|
| | | | | NOMINAL | LEVELS RATIO--
LOWER | 1 : 1
UPPER | | POINT | DEVIATION |
| 184 | 0100 | 1000 | 2835.00 | 2842.6 | 0.5 | 0.4 | 11.5 | 2863.1 | -0.5 |
| 185 | 0100 | 0111 | 2850.63 | 2870.8 | 0.4 | 0.4 | 8.1 | 2878.9 | -0.2 |
| 186 | 0100 | 0110 | 2866.25 | 2886.9 | -0.5 | -0.4 | 16.1 | 2894.8 | -7.9 |
| 187 | 0100 | 0101 | 2881.88 | 2910.9 | -0.6 | -0.4 | 24.0 | 2910.6 | 0.3 |
| 188 | 0100 | 0100 | 2897.50 | 2930.6 | -2.8 | 0.1 | 19.6 | 2926.5 | 4.1 |
| 189 | 0100 | 0011 | 2913.13 | 2936.0 | 0.5 | 0.6 | 5.4 | 2942.3 | -6.3 |
| 190 | 0100 | 0010 | 2928.75 | 2954.8 | -0.1 | 0.4 | 18.8 | 2958.1 | -3.3 |
| 191 | 0100 | 0001 | 2944.38 | 2976.9 | -0.7 | -0.5 | 22.1 | 2974.0 | 3.0 |
| 192 | 0100 | 0000 | 2960.00 | 2981.8 | -0.6 | -0.6 | 4.9 | 2989.8 | -7.9 |
| 193 | 0011 | 1111 | 2975.63 | 2999.4 | 0.5 | 0.5 | 17.6 | 3005.6 | -6.2 |
| 194 | 0011 | 1110 | 2991.25 | 3013.5 | 0.4 | 0.5 | 14.0 | 3021.5 | -8.0 |
| 195 | 0011 | 1101 | 3006.88 | 3039.3 | -0.7 | -0.0 | 25.8 | 3037.3 | 2.0 |
| 196 | 0011 | 1100 | 3022.50 | 3047.8 | -0.5 | -0.5 | 8.5 | 3053.1 | -5.3 |
| 197 | 0011 | 1011 | 3038.13 | 3066.0 | -0.0 | -0.5 | 18.2 | 3069.0 | -2.9 |
| 198 | 0011 | 1010 | 3053.75 | 3081.9 | 0.5 | 0.5 | 15.9 | 3084.8 | -2.9 |
| 199 | 0011 | 1001 | 3069.38 | 3106.5 | 0.5 | 0.5 | 24.6 | 3100.6 | 5.9 |
| 200 | 0011 | 1000 | 3085.00 | 3109.8 | -0.5 | -0.5 | 3.3 | 3116.5 | -6.7 |
| 201 | 0011 | 0111 | 3100.63 | 3126.7 | -0.5 | -0.5 | 16.9 | 3132.3 | -5.6 |
| 202 | 0011 | 0110 | 3116.25 | 3142.4 | 0.4 | -0.1 | 15.6 | 3148.1 | -5.8 |
| 203 | 0011 | 0101 | 3131.88 | 3166.9 | 0.4 | 0.6 | 23.9 | 3164.0 | 2.3 |
| 204 | 0011 | 0100 | 3147.50 | 3181.2 | 0.1 | 0.7 | 14.9 | 3179.8 | 1.4 |
| 205 | 0011 | 0011 | 3163.13 | 3192.1 | -0.6 | -0.5 | 10.9 | 3195.6 | -3.5 |
| 206 | 0011 | 0010 | 3178.75 | 3211.2 | -0.4 | -0.5 | 19.1 | 3211.5 | -0.2 |
| 207 | 0011 | 0001 | 3194.38 | 3233.1 | 0.4 | 0.4 | 21.8 | 3227.3 | 5.8 |
| 208 | 0011 | 0000 | 3210.00 | 3238.5 | 0.4 | 0.6 | 5.4 | 3243.1 | -4.6 |
| 209 | 0010 | 1111 | 3225.63 | 3253.0 | -0.5 | 0.0 | 14.5 | 3259.0 | -5.9 |

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2.3. THERMAL BUFFER BOX UNIT TEST MODEL: FLI, SAN 3 PAGE 5/3

17:46:51 PENALTY TEST ACCEPTANCE (AMBIENT VOLTAGE MARGIN LOW BUS

TEST THRESHOLD TEST COUNT= 13 SIGNIFICANCE=1



| SPEED
REF | A/D
THRESHOLD | OUTPUT | ITEM | ANALOG INPUT VOLTAGE | | (10) | INCREASE | BEST FIT STRAIGHT LINE | |
|--------------|------------------|--------|---------------|----------------------|-------|----------------|-----------------------|------------------------|-----------|
| | | | VALUE
(NO) | NOMINAL | LOWER | 1 : 1
UPPER | FROM REF
THRESHOLD | POINT | DEVIATION |
| 10 | 0010 | 1110 | 3241.25 | 3267.2 | -0.6 | -0.5 | 14.1 | 3274.8 | -7.6 |
| 11 | 0010 | 1101 | 3256.98 | 3292.5 | -0.1 | -0.5 | 15.3 | 3290.6 | 1.9 |
| 12 | 0010 | 1100 | 3272.50 | 3304.9 | 0.4 | 0.5 | 12.7 | 3306.5 | -1.6 |
| 13 | 0010 | 1011 | 3288.13 | 3319.8 | 0.4 | 0.5 | 14.9 | 3327.3 | -2.6 |
| 14 | 0010 | 1010 | 3303.25 | 3336.1 | -0.6 | -0.5 | 16.1 | 3348.1 | -2.1 |
| 15 | 0010 | 1001 | 3319.38 | 3360.5 | -0.6 | 0.4 | 14.4 | 3354.0 | 6.5 |
| 16 | 0010 | 1000 | 3335.00 | 3371.4 | 0.5 | 0.1 | 10.8 | 3369.8 | 1.6 |
| 17 | 0010 | 0111 | 3350.63 | 3379.8 | 0.5 | 0.5 | 8.4 | 3385.7 | -5.9 |
| 18 | 0010 | 0110 | 3366.25 | 3396.0 | -0.2 | 0.3 | 16.2 | 3401.5 | -5.5 |
| 19 | 0010 | 0101 | 3381.88 | 3420.6 | -0.7 | -0.5 | 14.6 | 3417.3 | 3.3 |
| 20 | 0010 | 0100 | 3397.50 | 3438.7 | -0.7 | -0.5 | 18.1 | 3433.2 | 5.5 |
| 21 | 0010 | 0011 | 3413.13 | 3445.6 | 0.5 | 0.6 | 6.9 | 3449.0 | -3.4 |
| 22 | 0010 | 0010 | 3428.75 | 3464.7 | 0.4 | 0.6 | 19.1 | 3464.8 | -0.1 |
| 23 | 0010 | 0001 | 3444.38 | 3487.7 | -0.5 | -0.2 | 21.0 | 3480.7 | 7.1 |
| 24 | 0010 | 0000 | 3460.00 | 3489.9 | -0.5 | -0.5 | 2.2 | 3496.5 | -5.6 |
| 25 | 0001 | 1111 | 3475.63 | 3508.7 | -0.1 | 0.5 | 12.8 | 3512.3 | -3.6 |
| 26 | 0001 | 1110 | 3491.25 | 3521.8 | 0.4 | 0.4 | 14.1 | 3528.2 | -6.3 |
| 27 | 0001 | 1101 | 3506.88 | 3547.5 | 0.5 | 0.6 | 25.2 | 3544.0 | 3.5 |
| 28 | 0001 | 1100 | 3522.50 | 3556.9 | -0.6 | 0.5 | 9.4 | 3559.8 | -2.9 |
| 29 | 0001 | 1011 | 3538.13 | 3576.3 | -0.6 | -0.5 | 19.4 | 3575.7 | 0.7 |
| 30 | 0001 | 1010 | 3553.75 | 3590.6 | 0.4 | -0.0 | 14.2 | 3591.5 | -0.9 |
| 31 | 0001 | 1001 | 3569.38 | 3616.2 | 0.4 | 0.6 | 20.6 | 3607.3 | 8.8 |
| 32 | 0001 | 1000 | 3585.00 | 3621.4 | -0.0 | 0.3 | 4.9 | 3623.2 | -2.1 |
| 33 | 0001 | 0111 | 3600.63 | 3636.6 | -0.6 | -0.5 | 16.5 | 3639.0 | -2.4 |
| 34 | 0001 | 0110 | 3616.25 | 3652.2 | -0.5 | -0.5 | 17.5 | 3654.8 | -2.7 |
| 35 | 0001 | 0101 | 3631.88 | 3676.3 | 0.4 | 0.6 | 24.1 | 3670.7 | 5.6 |
| 36 | 0001 | 0100 | 3647.50 | 3691.3 | 0.5 | 0.6 | 15.0 | 3686.5 | 4.8 |

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236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FIT. S/N 3 PAGE 534

1/12/01 15:46:51 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

11.13.5-8 A/D THRESHOLD TEST (HAND= 3, SENSOR=1)



| SHOUL D A/D OUTPUT
HEIK THRESHOLD | IDEAL
VALUE
(MV) | ANAL OG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | |
|--------------------------------------|------------------------|----------------------------|--------|-------|------------------------------------|------------------------|-----------|------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION | |
| 37 | 0001 0011 | 3663.13 | 3703.0 | -0.5 | 0.1 | 11.7 | 3702.3 | 0.7 |
| 38 | 0001 0010 | 3678.75 | 3721.4 | -0.7 | -0.6 | 18.4 | 3718.2 | 3.3 |
| 39 | 0001 0001 | 3694.38 | 3744.8 | -0.2 | -0.4 | 23.4 | 3734.0 | 10.8 |
| 40 | 0001 0000 | 3710.00 | 3760.8 | 0.5 | 0.6 | 16.0 | 3749.8 | 10.9 |
| 41 | 0000 1111 | 3725.63 | 3763.6 | 0.5 | 0.5 | 2.8 | 3765.7 | -2.1 |
| 42 | 0000 1110 | 3741.25 | 3777.7 | -0.6 | -0.5 | 14.1 | 3781.5 | -3.9 |
| 43 | 0000 1101 | 3756.88 | 3803.7 | -0.7 | -0.4 | 26.1 | 3797.4 | 6.4 |
| 44 | 0000 1100 | 3772.50 | 3814.7 | 0.6 | 0.1 | 11.0 | 3813.2 | 1.5 |
| 45 | 0000 1011 | 3788.13 | 3831.4 | 0.4 | 0.6 | 16.6 | 3829.0 | 2.4 |
| 46 | 0000 1010 | 3803.75 | 3846.5 | -0.1 | 0.5 | 15.1 | 3844.9 | 1.7 |
| 47 | 0000 1001 | 3819.38 | 3872.4 | -0.7 | -0.7 | 25.9 | 3860.7 | 11.7 |
| 48 | 0000 1000 | 3835.00 | 3882.8 | -0.5 | -0.5 | 10.4 | 3876.5 | 6.3 |
| 49 | 0000 0111 | 3850.63 | 3891.9 | 0.4 | 0.5 | 9.1 | 3892.4 | -0.5 |
| 50 | 0000 0110 | 3866.25 | 3907.5 | 0.3 | 0.6 | 15.6 | 3908.2 | -0.7 |
| 51 | 0000 0101 | 3881.88 | 3932.8 | -0.7 | 0.1 | 25.3 | 3924.0 | 8.8 |
| 52 | 0000 0100 | 3897.50 | 3952.4 | -0.8 | -0.5 | 19.6 | 3939.9 | 12.6 |
| 53 | 0000 0011 | 3913.13 | 3959.5 | 0.2 | -0.1 | 7.1 | 3955.7 | 3.8 |
| 54 | 0000 0010 | 3928.75 | 3976.8 | 0.5 | 0.6 | 17.3 | 3971.5 | 5.3 |
| 55 | 0000 0001 | 3944.38 | 4000.6 | -0.3 | 0.3 | 23.8 | 3987.4 | 13.2 |

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16 THEMATIC MAPPER MUX UNIT TEST MODEL .. F11. 5/2N 3 PAGE 536

12701 15:13:28 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

.14.5-4 A/D THRESHOLD TEST (COND= 4, SENSOR=1)



| INPUT A/D OUTPUT
PER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO= 1:1 | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | THRE
NU |
|-----------------------------------|------------------------|--|-------|-------|------------------------------------|------------------------|-----------|------------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION | |

FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | | |
|-----------|---------|-------|------|------|------|-------|------|----|
| 1111 1111 | -24.375 | -41.9 | -1.6 | -0.6 | | -37.3 | -4.6 | 2 |
| 1111 1110 | -8.750 | -26.8 | -0.1 | -0.8 | 15.1 | -21.5 | -5.1 | 2 |
| 1111 1101 | 6.875 | -4.1 | 0.7 | 0.7 | 22.6 | -5.6 | 1.5 | 2 |
| 1111 1100 | 22.500 | 10.0 | -0.0 | 0.7 | 14.1 | 10.2 | -0.7 | 2 |
| 1111 1011 | 38.125 | 24.2 | -0.7 | -0.7 | 14.2 | 26.1 | -1.8 | 2 |
| 1111 1010 | 53.750 | 41.9 | -0.8 | -0.7 | 17.1 | 41.9 | -0.6 | 2 |
| 1111 1001 | 69.375 | 62.1 | -1.5 | -2.1 | 20.8 | 57.8 | 4.4 | 21 |
| 1111 1000 | 85.000 | 67.8 | 0.7 | 0.7 | 5.7 | 73.6 | -5.8 | 21 |
| 1111 0111 | 100.625 | 85.4 | -0.1 | 0.6 | 17.6 | 89.5 | -4.1 | 21 |
| 1111 0110 | 116.250 | 103.0 | -0.8 | -0.8 | 17.6 | 105.3 | -2.3 | 21 |
| 1111 0101 | 131.875 | 124.4 | -0.1 | -0.7 | 21.4 | 121.2 | 3.3 | 21 |
| 1111 0100 | 147.500 | 140.8 | 0.7 | 0.8 | 16.3 | 137.0 | 3.8 | 21 |
| 1111 0011 | 163.125 | 151.3 | 0.6 | 0.6 | 10.5 | 152.9 | -1.6 | 21 |
| 1111 0010 | 178.750 | 171.2 | -0.8 | -0.1 | 19.9 | 168.7 | 2.5 | 21 |
| 1111 0001 | 194.375 | 188.6 | -0.7 | -0.7 | 17.4 | 184.6 | 4.0 | 21 |
| 1111 0000 | 210.000 | 199.9 | -0.1 | -0.9 | 11.3 | 200.4 | -0.5 | 21 |
| 1110 1111 | 225.625 | 212.5 | 0.7 | 0.7 | 12.6 | 216.3 | -3.8 | 22 |
| 1110 1110 | 241.250 | 227.7 | -0.2 | 0.6 | 15.2 | 232.1 | -4.4 | 22 |
| 1110 1101 | 256.875 | 251.3 | -0.7 | -0.7 | 23.6 | 248.0 | 3.4 | 23 |
| 1110 1100 | 272.500 | 267.8 | -0.8 | -0.7 | 16.5 | 263.8 | 4.0 | 23 |
| 1110 1011 | 288.125 | 278.3 | 0.7 | 0.0 | 10.5 | 279.7 | -1.3 | 23 |
| 1110 1010 | 303.750 | 295.8 | 0.6 | 0.8 | 17.4 | 295.5 | 0.3 | 23 |
| 1110 1001 | 319.375 | 314.6 | -0.1 | 0.7 | 13.8 | 311.4 | 3.3 | 23 |
| 1110 1000 | 335.000 | 327.5 | -0.8 | -0.8 | 12.9 | 327.2 | 0.3 | 23 |
| 1110 0111 | 350.625 | 340.7 | 0.0 | -0.7 | 13.2 | 343.1 | -2.3 | 23 |

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HS-
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13 +



| A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | THRESHOLD
NUMBER |
|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|---------------------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION | |
| 1110 0110 | 366.250 | 367.3 | 0.8 | 0.7 | 16.5 | 358.9 | -1.6 | 237 |
| 1110 0101 | 381.875 | 378.2 | 0.7 | 0.7 | 20.9 | 374.8 | 3.5 | 238 |
| 1110 0100 | 397.500 | 399.6 | -0.8 | 0.0 | 21.4 | 390.6 | 9.0 | 239 |
| 1110 0011 | 413.125 | 406.6 | -0.7 | -0.8 | 6.9 | 406.5 | 0.1 | 240 |
| 1110 0010 | 428.750 | 426.0 | -0.0 | 0.6 | 19.4 | 422.3 | 3.7 | |
| 1110 0001 | 444.375 | 442.3 | 0.7 | 0.7 | 16.3 | 438.2 | 4.2 | 241 |
| 1110 0000 | 460.000 | 446.7 | -0.0 | 0.7 | 4.4 | 454.0 | -7.3 | 242 |
| | | | | | | | | 243 |
| 1101 1111 | 475.625 | 468.2 | -0.8 | -0.7 | 21.5 | 469.9 | -1.6 | 244 |
| 1101 1110 | 491.250 | 482.8 | -0.6 | -0.7 | 14.6 | 485.7 | -2.9 | 245 |
| 1101 1101 | 506.875 | 505.8 | 0.6 | 0.0 | 23.0 | 501.6 | 4.2 | 246 |
| 1101 1100 | 522.500 | 520.0 | 0.8 | 0.7 | 14.2 | 517.4 | 2.6 | 247 |
| 1101 1011 | 538.125 | 533.9 | -0.6 | 0.1 | 13.9 | 543.3 | 0.7 | 248 |
| 1101 1010 | 553.750 | 551.0 | -0.9 | -0.8 | 12.1 | 549.1 | 1.9 | 249 |
| 1101 1001 | 569.375 | 570.0 | -0.1 | -0.7 | 19.0 | 565.0 | 5.0 | 250 |
| 1101 1000 | 585.000 | 579.6 | 0.7 | 0.8 | 9.5 | 580.8 | -1.3 | 251 |
| 1101 0111 | 600.625 | 594.9 | 0.6 | 0.7 | 15.3 | 596.7 | -1.8 | 252 |
| 1101 0110 | 616.250 | 612.2 | -0.8 | -0.1 | 12.3 | 612.5 | -0.3 | 253 |
| 1101 0101 | 631.875 | 633.8 | -0.7 | -0.6 | 21.6 | 628.4 | 5.4 | 254 |
| 1101 0100 | 647.500 | 650.9 | 0.7 | -0.1 | 12.1 | 644.2 | 6.7 | 255 |
| 1101 0011 | 663.125 | 660.4 | 0.6 | 0.6 | 9.5 | 660.1 | 0.3 | |
| 1101 0010 | 678.750 | 679.4 | -0.1 | 0.6 | 19.0 | 675.7 | 3.5 | |
| 1101 0001 | 694.375 | 697.3 | -0.7 | -0.7 | 12.9 | 691.8 | 5.6 | |
| 1101 0000 | 710.000 | 712.4 | -0.8 | -0.8 | 15.1 | 707.6 | 4.8 | |
| | | | | | | | | |
| 1100 1111 | 725.625 | 721.3 | 0.8 | 0.0 | 8.9 | 723.5 | -2.2 | |
| 1100 1110 | 741.250 | 735.9 | 0.7 | 0.8 | 14.6 | 739.3 | -3.4 | |
| 1100 1101 | 756.875 | 759.9 | -0.7 | 0 | 24.0 | 755.2 | 4.8 | |

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OF POOR QUALITY

THEMATIC MAPPER MIX UNIT TEST MODEL.. FLT. S/N 3 PAGE 508
 01 15:53:28 FINALITY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 3.4" 1111 1011 1001 1000 0111 0110 0101 0100 0011 0010 0001 0000



HS-206
 1981/1
 53 + 1.1

| A/D OUTPUT
THRESHOLD | TOTAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 1100 1100 | 772.500 | 774.1 | -0.7 | -0.7 | 14.2 | 771.0 | 3.1 |
| 1100 1011 | 788.125 | 787.4 | 0.0 | -0.6 | 13.2 | 786.9 | 0.5 |
| 1100 1010 | 803.750 | 803.8 | 0.7 | 0.7 | 16.4 | 802.7 | 1.0 |
| 1100 1001 | 819.375 | 822.5 | 0.6 | 0.7 | 18.7 | 818.6 | 3.9 |
| 1100 1000 | 835.000 | 838.5 | -0.7 | 0.1 | 15.9 | 834.4 | 4.0 |
| 1100 0111 | 850.625 | 848.6 | -0.7 | -0.7 | 10.1 | 850.3 | -1.7 |
| 1100 0110 | 866.250 | 864.8 | 0.6 | -0.0 | 16.1 | 866.1 | -1.4 |
| 1100 0101 | 881.875 | 885.9 | 0.7 | 0.7 | 21.2 | 882.0 | 4.0 |
| 1100 0100 | 897.500 | 906.4 | -0.0 | 0.7 | 20.5 | 897.8 | 8.6 |
| 1100 0011 | 913.125 | 913.8 | -0.6 | -0.7 | 7.3 | 913.7 | 0.1 |
| 1100 0010 | 928.750 | 932.9 | -0.7 | -0.8 | 19.2 | 929.5 | 3.4 |
| 1100 0001 | 944.375 | 949.1 | 0.7 | 0.0 | 16.2 | 945.4 | 3.7 |
| 1100 0000 | 960.000 | 962.4 | 0.8 | 0.8 | 13.3 | 961.2 | 1.2 |
| 1011 1111 | 975.625 | 974.9 | -0.7 | -0.0 | 12.4 | 977.1 | -2.2 |
| 1011 1110 | 991.250 | 989.4 | -0.9 | -0.9 | 14.5 | 992.9 | -3.6 |
| 1011 1101 | 1006.88 | 1014.0 | -0.1 | -0.8 | 24.6 | 1008.8 | 5.2 |
| 1011 1100 | 1022.50 | 1026.1 | 0.7 | 0.8 | 12.1 | 1024.6 | 1.5 |
| 1011 1011 | 1038.13 | 1039.5 | 0.6 | 0.7 | 13.4 | 1040.5 | -1.0 |
| 1011 1010 | 1053.75 | 1056.7 | -0.8 | -0.1 | 17.2 | 1056.3 | 0.4 |
| 1011 1001 | 1069.38 | 1079.7 | -0.8 | -0.7 | 23.0 | 1072.2 | 7.5 |
| 1011 1000 | 1085.00 | 1083.1 | 0.7 | -0.0 | 3.4 | 1088.0 | -5.0 |
| 1011 0111 | 1100.63 | 1100.6 | 0.7 | 0.7 | 17.6 | 1103.9 | -3.2 |
| 1011 0110 | 1116.25 | 1117.0 | 0.0 | 0.7 | 16.2 | 1119.7 | -2.7 |
| 1011 0101 | 1131.88 | 1140.3 | -0.7 | -0.7 | 23.3 | 1135.6 | 4.7 |
| 1011 0100 | 1147.50 | 1155.9 | -0.8 | -0.7 | 15.6 | 1151.4 | 4.1 |
| 1011 0011 | 1163.13 | 1165.8 | 0.6 | -0.1 | 9.2 | 1167.3 | -1.4 |
| 1011 0010 | 1178.75 | 1184.3 | 0.7 | 0.8 | 10.4 | 1183.1 | 1.2 |

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 OF POOR QUALITY

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| THRESHOLD
NUMBER | X/Y OUTPUT
THRESHOLD | IDEAL
VOLTAGE
(GV) | ANALOG INPUT VOLTAGE (GV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | 0.01 |
|---------------------|-------------------------|--------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|-------------------------------------|
| | | | LEVELS RATIO - 1 : 1 | | | | POINT | DEVIATION | |
| | | | NOMINAL | LOWER | UPPER | | | | |
| 158 | 0110 0010 | 2428.25 | 2451.7 | -0.1 | 0.4 | 20.0 | 2451.1 | 0.6 | ORIGINAL PAGE IS
OF POOR QUALITY |
| 159 | 0110 0001 | 2444.38 | 2472.0 | -0.9 | -0.5 | 20.3 | 2467.0 | 5.0 | |
| 160 | 0110 0000 | 2450.00 | 2477.8 | -0.7 | -0.7 | 5.8 | 2482.8 | -5.8 | |
| 161 | 0101 1111 | 2475.63 | 2493.6 | 0.8 | 0.7 | 15.8 | 2498.7 | -5.1 | |
| 162 | 0101 1110 | 2491.25 | 2508.1 | 0.7 | 0.9 | 14.5 | 2514.5 | -6.4 | |
| 163 | 0101 1101 | 2506.88 | 2534.6 | -0.8 | 0.0 | 26.4 | 2530.4 | 4.2 | |
| 164 | 0101 1100 | 2522.50 | 2542.7 | -0.8 | -0.8 | 8.2 | 2546.2 | -3.5 | |
| 165 | 0101 1011 | 2538.13 | 2559.0 | -0.0 | -0.8 | 16.3 | 2562.1 | -3.0 | |
| 166 | 0101 1010 | 2553.75 | 2575.5 | 0.9 | 0.8 | 16.5 | 2577.9 | -2.4 | |
| 167 | 0101 1001 | 2569.38 | 2599.7 | 0.7 | 0.7 | 24.2 | 2593.8 | 6.0 | |
| 168 | 0101 1000 | 2585.00 | 2605.4 | -0.9 | -0.9 | 5.7 | 2609.6 | -4.2 | |
| 169 | 0101 0111 | 2600.63 | 2620.2 | -0.7 | -0.7 | 14.7 | 2625.5 | -5.3 | |
| 170 | 0101 0110 | 2616.25 | 2636.6 | 0.7 | 0.0 | 16.4 | 2641.3 | -4.8 | |
| 171 | 0101 0101 | 2631.88 | 2660.2 | 0.8 | 0.8 | 24.6 | 2657.2 | 3.0 | |
| 172 | 0101 0100 | 2647.50 | 2676.8 | -0.0 | 0.8 | 16.6 | 2673.0 | 3.8 | |
| 173 | 0101 0011 | 2663.13 | 2685.3 | -0.7 | -0.8 | 8.5 | 2688.9 | -3.6 | |
| 174 | 0101 0010 | 2678.75 | 2704.6 | -0.7 | 0.8 | 19.3 | 2704.7 | -0.2 | |
| 175 | 0101 0001 | 2694.38 | 2724.0 | 0.6 | 0.6 | 19.4 | 2720.6 | 3.4 | |
| 176 | 0101 0000 | 2710.00 | 2738.7 | 0.8 | 0.7 | 14.7 | 2736.4 | 2.3 | |
| 177 | 0100 1111 | 2725.63 | 2746.5 | 0.7 | 0.0 | 7.8 | 2752.3 | -5.8 | |
| 178 | 0100 1110 | 2741.25 | 2761.5 | -0.9 | -0.8 | 15.0 | 2768.1 | -6.6 | |
| 179 | 0100 1101 | 2756.88 | 2786.6 | -0.0 | -0.7 | 25.1 | 2784.0 | 2.7 | |
| 180 | 0100 1100 | 2772.50 | 2797.6 | 0.8 | 0.8 | 11.0 | 2799.8 | -2.2 | |
| 181 | 0100 1011 | 2788.13 | 2810.7 | 0.6 | 0.6 | 13.0 | 2815.7 | -5.0 | |
| 182 | 0100 1010 | 2803.75 | 2828.8 | -0.8 | -0.8 | 18.1 | 2831.5 | -2.7 | |
| 183 | 0100 1001 | 2819.38 | 2852.6 | -0.8 | 0.7 | 23.8 | 2847.4 | 5.2 | |

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115 255 THERMATIC MATTER MIX UNIT TEST MODEL 11 FLY S/N 1 PAGE 543

198121201 15003128 THERMATIC TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN 10N BUS

198121201 15003128 THERMATIC TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN 10N BUS



| THERMATIC AND OUTPUT
NUMBER | THERMATIC
THRESHOLD | THERMATIC
UNIT | ANALOG INPUT VOLTAGE (NOV) | LEVELS RATIO-
NOMINAL | LOWER | UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--------------------------------|------------------------|-------------------|----------------------------|--------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | | | | | | POINT | DEVIATION |
| 184 | 0100 | 1000 | 2865.00 | 2862.4 | 0.6 | -0.1 | 9.8 | 2863.2 | -0.9 |
| 185 | 0100 | 0111 | 2870.63 | 2871.9 | 0.6 | 0.7 | 9.5 | 2879.1 | -7.2 |
| 186 | 0100 | 0110 | 2866.25 | 2889.1 | 0.0 | 0.7 | 17.2 | 2894.9 | -5.9 |
| 187 | 0100 | 0101 | 2881.88 | 2913.1 | -0.8 | -0.7 | 24.0 | 2910.8 | 2.3 |
| 188 | 0100 | 0100 | 2892.50 | 2933.7 | -0.1 | -0.8 | 20.6 | 2926.6 | 7.0 |
| 189 | 0100 | 0011 | 2913.13 | 2937.0 | 0.7 | 0.6 | 3.3 | 2942.5 | -5.5 |
| 190 | 0100 | 0010 | 2928.75 | 2956.6 | 0.6 | 0.7 | 19.4 | 2958.3 | -1.7 |
| 191 | 0100 | 0001 | 2944.38 | 2977.0 | -2.5 | -0.0 | 20.4 | 2974.2 | 2.0 |
| 192 | 0100 | 0000 | 2960.00 | 2985.4 | -0.9 | 0.9 | 8.4 | 2990.0 | -4.6 |
| 193 | 0011 | 1111 | 2997.63 | 2999.6 | 0.0 | 5.7 | 14.1 | 3005.9 | -4.3 |
| 194 | 0011 | 1110 | 2991.25 | 3013.2 | 0.9 | 0.8 | 13.6 | 3021.7 | -8.5 |
| 195 | 0011 | 1101 | 3005.88 | 3039.5 | -0.1 | 0.7 | 26.3 | 3037.6 | 1.9 |
| 196 | 0011 | 1100 | 3022.50 | 3053.1 | -0.8 | -0.8 | 13.6 | 3053.4 | -0.4 |
| 197 | 0011 | 1011 | 3038.13 | 3064.6 | -0.8 | -0.8 | 11.5 | 3069.3 | -4.7 |
| 198 | 0011 | 1010 | 3053.75 | 3081.1 | 0.8 | 0.0 | 16.5 | 3085.1 | -4.1 |
| 199 | 0011 | 1001 | 3069.38 | 3106.1 | -1.9 | 0.7 | 25.0 | 3101.0 | 5.1 |
| 200 | 0011 | 1000 | 3085.00 | 3108.0 | 2.4 | 0.8 | 1.9 | 3116.8 | -8.8 |
| 201 | 0011 | 0111 | 3100.63 | 3126.2 | -0.7 | 0.7 | 18.1 | 3132.7 | -6.5 |
| 202 | 0011 | 0110 | 3116.25 | 3143.1 | -0.1 | 0.8 | 17.0 | 3148.5 | -5.4 |
| 203 | 0011 | 0101 | 3131.88 | 3166.9 | 0.7 | 0.8 | 24.7 | 3164.4 | 2.5 |
| 204 | 0011 | 0100 | 3147.50 | 3182.3 | 0.6 | 0.8 | 15.4 | 3180.2 | 2.0 |
| 205 | 0011 | 0011 | 3163.13 | 3191.7 | -0.8 | 0.1 | 9.5 | 3196.1 | -4.4 |
| 206 | 0011 | 0010 | 3178.75 | 3211.0 | -0.8 | -0.8 | 19.3 | 3211.9 | -0.9 |
| 207 | 0011 | 0001 | 3194.38 | 3231.5 | -0.0 | -0.7 | 20.5 | 3227.8 | 3.7 |
| 208 | 0011 | 0000 | 3210.00 | 3237.5 | 0.7 | 0.8 | 6.0 | 3243.6 | -6.1 |
| 209 | 0010 | 1111 | 3225.63 | 3252.7 | -0.1 | 0.8 | 15.2 | 3259.5 | -6.7 |

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HS-236 THERMATIC MAPPER MUX UNIT TEST MODEL... FLT. S/N 3 PAGE 544

1981/12/01 15:53:28 TERNALY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

32000.0-4 AND THRESHOLD TEST CHAN= 4, SENSOR=1



DC017

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 210 | 0010 1110 | 3241.25 | 3268.2 | -0.7 | -0.7 | 15.5 | 3275.3 | -7.1 |
| 211 | 0010 1101 | 3256.88 | 3294.4 | -0.8 | -0.7 | 26.1 | 3291.2 | 3.2 |
| 212 | 0010 1100 | 3272.50 | 3303.8 | 0.7 | -0.0 | 9.4 | 3307.0 | -3.3 |
| 213 | 0010 1011 | 3288.13 | 3318.0 | 0.6 | 0.8 | 14.2 | 3322.9 | -4.9 |
| 214 | 0010 1010 | 3303.75 | 3335.5 | -0.1 | 0.7 | 17.5 | 3338.7 | -3.2 |
| 215 | 0010 1001 | 3319.38 | 3360.9 | -0.9 | -0.7 | 25.4 | 3354.6 | 6.3 |
| 216 | 0010 1000 | 3335.00 | 3367.7 | -0.0 | -0.8 | 6.8 | 3370.4 | -2.7 |
| 217 | 0010 0111 | 3350.63 | 3380.6 | 0.9 | 0.2 | 17.8 | 3386.3 | -5.7 |
| 218 | 0010 0110 | 3366.25 | 3397.1 | 0.6 | 0.8 | 16.5 | 3402.1 | -5.0 |
| 219 | 0010 0101 | 3381.88 | 3427.0 | -0.8 | 0.0 | 24.9 | 3418.0 | 4.0 |
| 220 | 0010 0100 | 3397.50 | 3441.8 | -0.9 | -0.7 | 19.8 | 3433.8 | 8.0 |
| 221 | 0010 0011 | 3413.13 | 3446.3 | -0.0 | -0.7 | 4.5 | 3449.7 | -3.4 |
| 222 | 0010 0010 | 3428.75 | 3465.1 | 0.8 | 0.8 | 18.8 | 3465.5 | -0.5 |
| 223 | 0010 0001 | 3444.38 | 3482.5 | -0.1 | 0.7 | 17.4 | 3481.4 | 1.1 |
| 224 | 0010 0000 | 3460.00 | 3495.8 | -0.8 | -0.7 | 13.3 | 3497.2 | -1.4 |
| 225 | 0001 1111 | 3475.63 | 3508.7 | -0.8 | -0.7 | 12.9 | 3513.1 | -4.4 |
| 226 | 0001 1110 | 3491.25 | 3522.6 | 0.7 | 0.0 | 13.9 | 3528.9 | -6.3 |
| 227 | 0001 1101 | 3506.88 | 3549.9 | 0.1 | 0.6 | 27.2 | 3544.8 | 5.1 |
| 228 | 0001 1100 | 3522.50 | 3562.0 | -5.6 | 0.8 | 12.1 | 3560.6 | 1.3 |
| 229 | 0001 1011 | 3538.13 | 3574.7 | -0.8 | -0.7 | 12.7 | 3576.5 | -1.8 |
| 230 | 0001 1010 | 3553.75 | 3591.6 | -0.1 | -0.8 | 16.9 | 3592.3 | -0.8 |
| 231 | 0001 1001 | 3569.38 | 3613.8 | -2.3 | 0.8 | 22.3 | 3608.2 | 5.6 |
| 232 | 0001 1000 | 3585.00 | 3620.5 | 0.7 | 0.8 | 6.7 | 3624.0 | -3.5 |
| 233 | 0001 0111 | 3600.63 | 3637.5 | -0.8 | 0.0 | 16.9 | 3639.9 | -2.4 |
| 234 | 0001 0110 | 3616.25 | 3653.7 | -0.8 | -0.9 | 16.2 | 3655.7 | -2.1 |
| 235 | 0001 0101 | 3631.88 | 3678.1 | -0.1 | -0.8 | 24.4 | 3671.6 | 6.5 |
| 236 | 0001 0100 | 3647.50 | 3694.3 | 0.5 | 0.8 | 16.2 | 3687.4 | 6.9 |

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-236 THERMATIC MUXER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 546

11/12/01 15:59:51 FINALITY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

11.14.11-11 AND THRESHOLD TEST CRAND= 5, SENSOR=1
S I I A A K Y



00111

OK 1) BUS ERROR, 2) THRESHOLD INCREMENT(+/- 0.0 - THRESHOLD = 31.2)

REMAINING DATA ARE FOR INFORMATION ONLY

TEST FOR STRAIGHT LINE TEST Y -11.477X -41.3MV

DEVIATION OF SLOPE FROM IDEAL IS: 1.612%

OFFSET IS:-41.3MV

COEFFICIENT OF DETERMINATION IS: RXX2= .99998830

ANALOG INPUT DURING DC RESTORE IS:64.1MV

MUX ERROR = 1.845MV REPORT: RMS ERROR <= 1.812MV

THRESHOLD INCREMENT MEASUREMENT

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 24.8MV | 158 | 15.923MV | 2.6MV | 241 | 4.356MV |

COEFFICIENT OF DETERMINATION RXX2 = 1.0

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 1.8MV | 64 | -0.245MV | -4.7MV | 231 | 1.470MV |

COEFFICIENT OF DETERMINATION RXX2 = 1.0

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|---------|---------|-------------|--------------------|
| 2.6MV | 25 | 0.014MV | -1.9MV | 192 | 1.294MV |

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OF POOR QUALITY

3. THERMAL BATTERY MAX UNIT TEST MODEL... P11. 547.3 PAGE 547
 12/01 16:00:00 QUALITY TEST ACCEPTANCE 0.000000 VALUE OF MARGIN LOW BUS

20
TEST
527

1111-11 ONLY TESTED BY THE CRONIN-50 SENSITIVE

| REF AND OBJECT
SE THRESHOLD | DECT
VALUE
(MVS) | ANALOG INPUT VOLTAGE
LEVELS RATIO-
NOMINAL POWER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT DEVIATION | RC01 |
|--------------------------------|------------------------|--|------------------------------------|---|------|
|--------------------------------|------------------------|--|------------------------------------|---|------|

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | |
|-----------|---------|-------|------|------|-------|------|
| 1111 1111 | -24.575 | -30.7 | -2.4 | -1.2 | -25.5 | -0.3 |
| 1111 1110 | 6.750 | -13.3 | -1.4 | -1.2 | -9.6 | -3.8 |
| 1111 1101 | 6.875 | 4.9 | 1.3 | 0.1 | 18.3 | -1.3 |
| 1111 1100 | 22.500 | 19.2 | 1.5 | 1.6 | 22.2 | -4.0 |
| 1111 1011 | 30.125 | 36.4 | -1.5 | 0.0 | 17.2 | -1.6 |
| 1111 1010 | 53.250 | 55.0 | -1.4 | -1.4 | 18.6 | 1.1 |
| 1111 1001 | 69.375 | 73.0 | -0.0 | -1.4 | 18.0 | 3.2 |
| 1111 1000 | 85.000 | 82.2 | 1.4 | 1.5 | 9.2 | -4.5 |
| 1111 0111 | 100.625 | 96.9 | 1.4 | 1.4 | 14.7 | -4.6 |
| 1111 0110 | 116.250 | 117.7 | -1.5 | 0.1 | 20.7 | 0.2 |
| 1111 0101 | 131.875 | 135.2 | -1.5 | -1.3 | 17.5 | 1.9 |
| 1111 0100 | 147.500 | 151.8 | 1.4 | 0.1 | 16.6 | 2.6 |
| 1111 0011 | 163.125 | 163.6 | 1.3 | 1.3 | 11.8 | -1.5 |
| 1111 0010 | 178.750 | 185.1 | -0.1 | 1.5 | 21.4 | 4.1 |
| 1111 0001 | 194.375 | 201.7 | -1.4 | -1.4 | 16.6 | 4.9 |
| 1111 0000 | 210.000 | 214.4 | -1.1 | -1.2 | 12.7 | 1.7 |
| 1110 1111 | 225.625 | 225.3 | 1.3 | 0.1 | 10.9 | -3.2 |
| 1110 1110 | 241.250 | 242.7 | 1.3 | 1.2 | 17.4 | -1.8 |
| 1110 1101 | 256.875 | 263.2 | -1.3 | -0.0 | 20.5 | 2.9 |
| 1110 1100 | 272.500 | 279.5 | -1.4 | -1.5 | 16.3 | 3.3 |
| 1110 1011 | 288.125 | 292.9 | 0.1 | -1.2 | 13.5 | 0.9 |
| 1110 1010 | 303.750 | 310.9 | 1.3 | 1.4 | 18.0 | 3.0 |
| 1110 1001 | 319.375 | 328.2 | 1.5 | 1.3 | 17.2 | 4.3 |
| 1110 1000 | 335.000 | 342.9 | -1.3 | 0.1 | 14.7 | 3.2 |
| 1110 0111 | 350.625 | 354.7 | -1.3 | -1.3 | 11.8 | -0.9 |

ORIGINAL PAGE 19
OF POOR QUALITY



DEC 01 '81

| SHOLD AND OUTPUT
REF THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | |
|-----------------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION | |
| 6 | 1110 0110 | 366.250 | 372.7 | 1.5 | 0.1 | 18.0 | 371.5 | 1.2 |
| 7 | 1110 0101 | 381.875 | 390.0 | 1.2 | 1.2 | 17.3 | 387.3 | 2.6 |
| 8 | 1110 0100 | 397.500 | 409.5 | -0.0 | 1.5 | 19.5 | 403.2 | 6.3 |
| 9 | 1110 0011 | 413.125 | 420.9 | -1.3 | -1.4 | 11.4 | 419.1 | 1.8 |
| 0 | 1110 0010 | 428.750 | 442.7 | -1.5 | -1.5 | 21.8 | 435.0 | 7.7 |
| 1 | 1110 0001 | 444.375 | 455.9 | 1.3 | 0.0 | 13.2 | 450.8 | 5.0 |
| 2 | 1110 0000 | 460.000 | 464.2 | 0.8 | 0.8 | 8.4 | 466.7 | -2.5 |
| 3 | 1101 1111 | 475.625 | 481.0 | -1.3 | 0.0 | 16.7 | 482.6 | -1.6 |
| 4 | 1101 1110 | 491.250 | 497.6 | -1.4 | -1.4 | 16.6 | 498.5 | -0.9 |
| 5 | 1101 1101 | 506.875 | 517.4 | 0.0 | -1.3 | 19.8 | 514.4 | 3.0 |
| 6 | 1101 1100 | 522.500 | 530.2 | 1.3 | 1.4 | 12.8 | 530.2 | 0.0 |
| 7 | 1101 1011 | 538.125 | 545.7 | 1.3 | 1.3 | 15.5 | 546.1 | -0.4 |
| 8 | 1101 1010 | 553.750 | 564.8 | -1.3 | 0.0 | 19.0 | 562.0 | 2.8 |
| 9 | 1101 1001 | 569.375 | 583.4 | -1.3 | -1.3 | 18.7 | 577.9 | 5.6 |
| 0 | 1101 1000 | 585.000 | 594.3 | 1.5 | -0.0 | 10.9 | 593.7 | 0.6 |
| 1 | 1101 0111 | 600.625 | 606.9 | 1.3 | 1.2 | 12.5 | 609.6 | -2.7 |
| 2 | 1101 0110 | 616.250 | 625.4 | -0.0 | 1.2 | 18.5 | 625.5 | -0.1 |
| 3 | 1101 0101 | 631.875 | 644.3 | -1.3 | -1.3 | 18.9 | 641.4 | 2.9 |
| 4 | 1101 0100 | 647.500 | 660.9 | -1.5 | -1.4 | 16.6 | 657.2 | 3.7 |
| 5 | 1101 0011 | 663.125 | 672.4 | 1.4 | -0.0 | 11.4 | 673.1 | -0.8 |
| 6 | 1101 0010 | 678.750 | 693.1 | 1.2 | 1.3 | 20.8 | 689.0 | 4.1 |
| 7 | 1101 0001 | 694.375 | 709.9 | -1.4 | -0.1 | 16.7 | 704.9 | 5.0 |
| 8 | 1101 0000 | 710.000 | 725.9 | -1.0 | -1.1 | 16.0 | 720.8 | 5.2 |
| 9 | 1100 1111 | 725.625 | 734.6 | 0.1 | -1.4 | 8.6 | 736.6 | -2.1 |
| 0 | 1100 1110 | 741.250 | 749.7 | 1.4 | 1.4 | 17.1 | 752.5 | -2.8 |
| 1 | 1100 1101 | 756.875 | 769.3 | 1.4 | 1.3 | 19.6 | 768.4 | 0.9 |

ORIGINAL PAGE IS
OF POOR QUALITY

THEMATIC MAPPER MIX UNIT TEST MODEL 1111 S/N 3 PAGE 549
 701 16:00:05 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 1111-11 0000 THRESHOLD ID TEST CHANNELS = 5 SENSORS = 1



| D A/D OUTPUT
THRESHOLD | D A/D
UNIT | ANALOG INPUT VOLTAGE (MV)
NOMINAL | LEVELS RATIO - 1:1 | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------------|---------------|--------------------------------------|--------------------|--------|------------------------------------|------------------------|-----------|
| | | | LOWER | HIGHER | | POINT | DEVIATION |
| 1100 1100 | 777.100 | 786.5 | -1.4 | 0.0 | 17.2 | 784.3 | 2.3 |
| 1100 1011 | 788.125 | 800.1 | -1.4 | -1.4 | 12.6 | 800.1 | -0.0 |
| 1100 1010 | 803.750 | 817.2 | 1.4 | 0.0 | 17.1 | 816.0 | 1.2 |
| 1100 1001 | 819.375 | 834.9 | 1.3 | 1.4 | 17.7 | 831.9 | 3.0 |
| 1100 1000 | 835.000 | 851.7 | 0.0 | 1.3 | 16.8 | 847.8 | 3.9 |
| 1100 0111 | 850.625 | 861.1 | -1.3 | 1.4 | 9.4 | 853.6 | -2.6 |
| 1100 0110 | 866.250 | 879.7 | -1.3 | -1.3 | 18.6 | 879.5 | 0.2 |
| 1100 0101 | 881.875 | 895.7 | 1.3 | -0.0 | 16.0 | 895.4 | 0.3 |
| 1100 0100 | 897.500 | 915.6 | 1.4 | 1.4 | 19.9 | 911.3 | 4.3 |
| 1100 0011 | 913.125 | 926.4 | -1.4 | 0.1 | 18.8 | 927.2 | -0.8 |
| 1100 0010 | 928.750 | 947.3 | -1.3 | -1.4 | 20.9 | 943.0 | 4.3 |
| 1100 0001 | 944.375 | 962.4 | 0.0 | -1.4 | 15.1 | 958.9 | 3.5 |
| 1100 0000 | 960.000 | 977.2 | 1.3 | 1.7 | 14.8 | 974.8 | 2.4 |
| 1011 1111 | 975.625 | 988.6 | 1.4 | 1.4 | 11.4 | 990.7 | -2.1 |
| 1011 1110 | 991.250 | 1006.4 | -1.3 | 0.0 | 17.8 | 1006.5 | -0.1 |
| 1011 1101 | 1006.88 | 1025.8 | -1.3 | -1.4 | 19.4 | 1022.4 | 3.4 |
| 1011 1100 | 1022.50 | 1038.8 | 1.4 | -0.0 | 13.0 | 1038.3 | 0.5 |
| 1011 1011 | 1038.13 | 1054.0 | 1.3 | 1.4 | 15.2 | 1054.2 | -0.2 |
| 1011 1010 | 1053.75 | 1070.8 | 0.0 | 1.5 | 16.8 | 1070.0 | 0.8 |
| 1011 1001 | 1069.38 | 1091.4 | -1.3 | -1.4 | 20.6 | 1085.9 | 5.5 |
| 1011 1000 | 1085.00 | 1101.1 | -1.3 | -1.3 | 9.7 | 1101.8 | -0.7 |
| 1011 0111 | 1100.63 | 1114.9 | 1.3 | -0.0 | 13.8 | 1117.7 | -2.7 |
| 1011 0110 | 1116.25 | 1133.1 | 1.3 | 1.4 | 18.1 | 1134.6 | -0.5 |
| 1011 0101 | 1131.88 | 1152.2 | -1.3 | 2.6 | 19.2 | 1149.4 | 2.8 |
| 1011 0100 | 1147.50 | 1169.6 | -1.3 | -1.3 | 17.4 | 1165.3 | 4.3 |
| 1011 0011 | 1163.13 | 1181.6 | 0.0 | -1.4 | 12.0 | 1181.2 | 0.4 |
| 1011 0010 | 1178.75 | 1201.1 | 1.3 | 1.3 | 19.5 | 1197.1 | 4.0 |

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C
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THEMATIC MAPPER MIX UNIT TEST MODEL 1. FLT. S/N 3 PAGE 550
 701 16:00:00 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 3.5--4 AND THRESHOLD TEST (GAIN= 5, SENSIT=1)

HAC
TEST
527

000178

| A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(KV) | ANALOG INPUT VOLTAGE (KV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 1011 0001 | 1194.38 | 1216.2 | 1.4 | 1.4 | 15.1 | 1212.9 | 3.3 |
| 1011 0000 | 1210.00 | 1233.2 | -1.2 | -0.1 | 17.0 | 1228.8 | 4.4 |
| 1010 1111 | 1225.63 | 1242.4 | -1.3 | -1.3 | 9.1 | 1244.7 | -2.3 |
| 1010 1110 | 1241.25 | 1257.3 | 1.3 | 0.1 | 14.9 | 1260.6 | -3.3 |
| 1010 1101 | 1256.88 | 1276.9 | 1.3 | 1.3 | 19.5 | 1276.4 | 0.4 |
| 1010 1100 | 1272.50 | 1293.5 | -0.0 | 1.4 | 16.6 | 1292.3 | 1.2 |
| 1010 1011 | 1288.13 | 1307.7 | -1.4 | -1.4 | 14.2 | 1308.2 | -0.5 |
| 1010 1010 | 1303.75 | 1325.6 | -1.4 | -1.4 | 17.8 | 1324.1 | 1.5 |
| 1010 1001 | 1319.38 | 1342.3 | 1.4 | 0.0 | 16.7 | 1340.0 | 2.3 |
| 1010 1000 | 1335.00 | 1355.6 | 1.3 | 1.3 | 13.3 | 1355.8 | -0.2 |
| 1010 0111 | 1350.63 | 1368.6 | -1.3 | 0.1 | 12.9 | 1371.7 | -3.2 |
| 1010 0110 | 1366.25 | 1386.9 | -1.4 | -1.5 | 18.4 | 1387.6 | -0.6 |
| 1010 0101 | 1381.88 | 1407.0 | -2.6 | -1.4 | 20.1 | 1403.5 | 3.6 |
| 1010 0100 | 1397.50 | 1421.9 | 1.3 | 1.4 | 14.8 | 1419.3 | 2.5 |
| 1010 0011 | 1413.13 | 1432.4 | 1.4 | 1.4 | 10.5 | 1435.2 | -2.8 |
| 1010 0010 | 1428.75 | 1455.1 | -1.1 | 0.1 | 22.7 | 1451.1 | 4.0 |
| 1010 0001 | 1444.38 | 1469.7 | -1.4 | -1.3 | 14.6 | 1467.0 | 2.8 |
| 1010 0000 | 1460.00 | 1482.4 | 1.1 | 0.0 | 12.7 | 1482.8 | -0.5 |
| 1001 1111 | 1475.63 | 1492.1 | 1.4 | 1.3 | 9.7 | 1498.7 | -6.6 |
| 1001 1110 | 1491.25 | 1507.8 | 0.0 | 1.4 | 15.7 | 1514.6 | -6.8 |
| 1001 1101 | 1506.88 | 1529.1 | -1.3 | -1.3 | 21.2 | 1530.5 | -1.4 |
| 1001 1100 | 1522.50 | 1542.1 | -1.4 | -1.5 | 13.0 | 1546.3 | -4.2 |
| 1001 1011 | 1538.13 | 1557.4 | 1.3 | -0.0 | 15.3 | 1562.2 | -4.8 |
| 1001 1010 | 1553.75 | 1573.7 | 1.4 | 1.4 | 16.3 | 1578.1 | -4.4 |
| 1001 1001 | 1569.38 | 1594.8 | -1.4 | 0.0 | 21.1 | 1594.0 | 0.8 |
| 1001 1000 | 1585.00 | 1606.4 | -1.5 | -1.5 | 11.6 | 1609.9 | -3.5 |

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HYPER MATHS UNIT TEST MODEL: FLI. S/N 3 PAGE 552

16:00:00 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

5-1-12 2-1-12 10-1-12 15-1-12 20-1-12 25-1-12 30-1-12 35-1-12 40-1-12 45-1-12 50-1-12 55-1-12 60-1-12 65-1-12 70-1-12 75-1-12 80-1-12 85-1-12 90-1-12 95-1-12 100-1-12



HS-2
1981
3-1-12

| ID (OUTPUT
RESHOLD) | IDEAL
VOLTAGE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INPUT AS
FROM FROU
THRESHOLD | BEST FIT STRAIGHT LINE | |
|------------------------|--------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |

RE 01-81

THIR
NUM

| | | | | | | | |
|---------|---------|--------|------|------|------|--------|------|
| 11 1101 | 2006.88 | 2043.4 | -2.8 | 0.0 | 22.2 | 2038.5 | 4.9 |
| 11 1100 | 2022.50 | 2057.8 | -1.6 | -1.5 | 19.4 | 2054.4 | 3.4 |
| 11 1011 | 2038.13 | 2070.1 | -0.3 | -1.5 | 12.3 | 2070.3 | -0.2 |
| 11 1010 | 2053.75 | 2087.6 | 1.4 | 1.5 | 17.5 | 2086.2 | 1.4 |
| 11 1001 | 2069.33 | 2104.6 | 1.4 | 1.4 | 17.0 | 2102.6 | 2.6 |
| 11 1000 | 2085.00 | 2116.6 | -1.4 | -1.4 | 11.9 | 2117.9 | -1.3 |
| 11 0111 | 2100.63 | 2131.1 | -1.4 | -1.4 | 14.5 | 2133.8 | -2.7 |
| 11 0110 | 2116.25 | 2149.1 | 1.4 | 0.0 | 18.0 | 2149.7 | -0.4 |
| 11 0101 | 2131.88 | 2169.7 | -2.6 | 1.4 | 20.6 | 2165.5 | 4.2 |
| 11 0100 | 2147.50 | 2185.5 | 0.0 | 1.5 | 16.9 | 2181.4 | 5.1 |
| 11 0011 | 2163.13 | 2196.4 | -1.4 | -1.4 | 9.8 | 2197.3 | -0.9 |
| 11 0010 | 2178.75 | 2218.4 | -1.5 | -1.5 | 22.0 | 2213.2 | 5.2 |
| 11 0001 | 2194.38 | 2231.1 | 1.4 | 1.4 | 12.7 | 2229.1 | 2.0 |
| 11 0000 | 2210.00 | 2246.5 | 1.1 | 1.1 | 15.4 | 2244.9 | 1.6 |
| 10 1111 | 2225.63 | 2257.4 | -1.5 | 0.0 | 10.9 | 2260.8 | -3.4 |
| 10 1110 | 2241.25 | 2274.9 | -1.6 | -1.6 | 17.5 | 2276.7 | -1.8 |
| 10 1101 | 2256.88 | 2296.1 | -2.9 | -1.5 | 21.2 | 2292.6 | 3.6 |
| 10 1100 | 2272.50 | 2313.1 | 1.6 | 1.5 | 17.0 | 2308.4 | 4.7 |
| 10 1011 | 2288.13 | 2321.3 | 1.5 | 1.4 | 8.1 | 2324.3 | -3.0 |
| 10 1010 | 2303.75 | 2342.1 | -1.5 | -1.5 | 20.8 | 2340.2 | 1.9 |
| 10 1001 | 2319.38 | 2363.7 | -1.5 | -1.4 | 16.6 | 2356.1 | 2.7 |
| 10 1000 | 2335.00 | 2370.8 | 1.4 | 0.0 | 12.1 | 2371.9 | -1.1 |
| 10 0111 | 2350.63 | 2382.3 | 1.4 | 1.4 | 11.4 | 2387.8 | -5.6 |
| 10 0110 | 2366.25 | 2401.8 | 0.1 | 1.6 | 19.5 | 2403.7 | 1.9 |
| 10 0101 | 2381.88 | 2423.7 | -1.4 | -1.4 | 21.9 | 2419.6 | 4.1 |
| 10 0100 | 2397.50 | 2440.8 | -1.6 | 1.0 | 17.1 | 2431.5 | 5.4 |
| 10 0011 | 2413.13 | 2447.4 | 1.5 | 1.6 | 6.5 | 2451.3 | -3.9 |

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OF POOR QUALITY

193 105 THERMATIC MACHINER BOX UNIT TEST MODEL 1.0 FILE 5211 PAGE 1573
 193121701 16:00:00 CUMULATIVE TEST ACCEPTABLE PARAMETER OUTSIDE MARGIN FOR BUS
 16:00:00 16:00:00 16:00:00 16:00:00 16:00:00 16:00:00 16:00:00 16:00:00 16:00:00 16:00:00

1056
 1573
 5211

| THERMOCOUPLER AND OUTPUT
CIRCUIT THERMOCOUPLER | THERMOCOUPLER
CIRCUIT | THERMOCOUPLER
CIRCUIT | THERMOCOUPLER
CIRCUIT | THERMOCOUPLER VOLTAGE (mV) | | THERMOCOUPLER
CIRCUIT | THERMOCOUPLER
CIRCUIT | BEST FIT STRAIGHT LINE | |
|---|--------------------------|--------------------------|--------------------------|----------------------------|-------|--------------------------|--------------------------|------------------------|-----------|
| | | | | NOMINAL | LOWER | | | POINT | DEVIATION |
| 153 | 0110 | 0010 | 2463.75 | 2472.2 | -0.4 | -0.4 | 24.8 | 2467.2 | 5.0 |
| 152 | 0110 | 0001 | 2444.38 | 2485.0 | -1.6 | 0.0 | 12.8 | 2483.1 | 1.9 |
| 150 | 0110 | 0000 | 2450.00 | 2492.6 | -1.4 | 1.4 | 12.6 | 2492.0 | -1.3 |
| 161 | 0101 | 1111 | 2511.63 | 2508.8 | 0.1 | -1.4 | 11.2 | 2514.8 | -6.0 |
| 162 | 0101 | 1110 | 2491.25 | 2524.7 | 1.5 | 1.5 | 11.8 | 2530.2 | -6.0 |
| 163 | 0101 | 1101 | 2506.38 | 2545.8 | -1.5 | 1.4 | 21.1 | 2546.6 | -0.8 |
| 159 | 0101 | 1100 | 2522.50 | 2562.9 | 1.2 | 1.2 | 12.0 | 2562.5 | 0.4 |
| 165 | 0101 | 1011 | 2535.13 | 2574.3 | -1.5 | 1.4 | 11.4 | 2573.3 | -4.0 |
| 155 | 0101 | 1010 | 2511.25 | 2590.9 | 1.5 | 0.0 | 16.6 | 2594.2 | -3.3 |
| 167 | 0101 | 1001 | 2559.63 | 2608.8 | 1.5 | 1.5 | 12.2 | 2610.1 | -1.3 |
| 169 | 0101 | 1000 | 2551.00 | 2621.5 | 0.0 | 1.5 | 12.7 | 2626.0 | -4.4 |
| 168 | 0101 | 0111 | 2608.53 | 2635.3 | -1.4 | 1.5 | 11.8 | 2641.8 | -6.5 |
| 170 | 0101 | 0110 | 2616.25 | 2654.2 | -1.4 | 1.4 | 18.9 | 2657.2 | -1.5 |
| 171 | 0101 | 0101 | 2631.38 | 2673.5 | -2.3 | 1.4 | 19.3 | 2673.6 | 0.1 |
| 17 | 0101 | 0100 | 2642.50 | 2690.2 | -2.0 | 1.5 | 12.2 | 2689.5 | 1.2 |
| 17 | 0101 | 0011 | 2653.13 | 2700.2 | 1.6 | 0.0 | 16.0 | 2705.4 | -4.2 |
| 1 | 0101 | 0010 | 2673.25 | 2725.1 | 1.6 | -1.6 | 21.4 | 2721.2 | 0.2 |
| 17 | 0101 | 0001 | 2694.38 | 2736.2 | 0.0 | 1.5 | 19.5 | 2737.1 | -0.5 |
| 17 | 0101 | 0000 | 2710.00 | 2754.0 | 1.2 | 1.5 | 12.4 | 2751.0 | 1.0 |
| 177 | 0100 | 1111 | 2725.63 | 2760.2 | 1.5 | 1.5 | 6.2 | 2768.9 | -8.6 |
| 175 | 0100 | 1110 | 2741.25 | 2778.6 | -1.5 | 0.2 | 18.4 | 2784.2 | -6.1 |
| 172 | 0100 | 1101 | 2755.38 | 2800.1 | -1.5 | 1.6 | 21.5 | 2800.6 | -0.5 |
| 186 | 0100 | 1100 | 2772.50 | 2811.0 | -1.1 | -0.1 | 14.9 | 2816.5 | -1.5 |
| 181 | 0100 | 1011 | 2788.13 | 2825.6 | 1.5 | 1.5 | 10.6 | 2832.4 | -6.8 |
| 18 | 0100 | 1010 | 2803.25 | 2844.2 | -0.0 | 1.6 | 18.5 | 2848.2 | -4.1 |
| 182 | 0100 | 1001 | 2819.38 | 2863.1 | -1.4 | -1.5 | 19.0 | 2869.1 | -1.0 |

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 OF POOR QUALITY



DC01 81

| THRESHOLD
NUMBER | O/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 237 | 0001 0011 | 3663.13 | 3719.6 | 1.5 | 1.6 | 9.8 | 3721.5 | -1.9 |
| 238 | 0001 0010 | 3678.75 | 3740.1 | -0.1 | 1.7 | 20.5 | 3737.3 | 2.8 |
| 239 | 0001 0001 | 3694.38 | 3757.8 | -1.7 | -1.7 | 17.7 | 3753.2 | 4.6 |
| 240 | 0001 0000 | 3710.00 | 3779.1 | -1.5 | -1.4 | 21.3 | 3769.1 | 10.0 |
| 241 | 0000 1111 | 3725.63 | 3781.7 | 1.5 | 1.5 | 7.6 | 3785.0 | -3.2 |
| 242 | 0000 1110 | 3741.25 | 3798.4 | 1.5 | 1.7 | 16.7 | 3800.9 | -2.4 |
| 243 | 0000 1101 | 3756.88 | 3821.9 | -1.7 | 0.0 | 23.5 | 3816.7 | 5.2 |
| 244 | 0000 1100 | 3772.50 | 3841.3 | -1.8 | -1.6 | 19.4 | 3832.6 | 8.7 |
| 245 | 0000 1011 | 3788.13 | 3849.8 | -0.0 | -1.6 | 8.5 | 3848.5 | 1.3 |
| 246 | 0000 1010 | 3803.75 | 3866.2 | 1.4 | 1.6 | 16.4 | 3864.4 | 1.8 |
| 247 | 0000 1001 | 3819.38 | 3889.9 | -3.6 | 1.0 | 23.7 | 3880.2 | 9.7 |
| 248 | 0000 1000 | 3835.00 | 3904.2 | -2.5 | -1.0 | 14.3 | 3896.1 | 8.1 |
| 249 | 0000 0111 | 3850.63 | 3912.0 | -1.6 | -1.6 | 7.8 | 3912.0 | 0.0 |
| 250 | 0000 0110 | 3866.25 | 3929.0 | 1.5 | 0.0 | 17.0 | 3927.9 | 1.1 |
| 251 | 0000 0101 | 3881.88 | 3950.3 | -2.4 | 1.7 | 21.3 | 3943.7 | 6.6 |
| 252 | 0000 0100 | 3897.50 | 3970.1 | -0.2 | 0.4 | 19.8 | 3959.6 | 10.5 |
| 253 | 0000 0011 | 3913.13 | 3978.5 | -1.7 | -1.7 | 8.4 | 3975.5 | 3.0 |
| 254 | 0000 0010 | 3928.75 | 3999.2 | 0.9 | 1.0 | 21.2 | 3991.4 | 8.4 |
| 255 | 0000 0001 | 3944.38 | 4013.8 | 1.6 | 1.8 | 14.0 | 4007.3 | 6.5 |

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OF POOR QUALITY

HS-215 TH-MATIC MAPPER MIX UNIT TEST MODEL: 111. S/113 PAGE 157
 190112Z01 16:06128 FUNCITY TEST ACCEPTANCE W AMBIENT VOLTAGE MARGIN LOW BUS



DEC 01 81

CHUCK 1) THIS ERROR 2) THIS SHOULD INCREMENT (+/- 0.0 = 100% INC = 31.2)
 THE REMAINING DATA ARE FOR INFORMATION ONLY

REF: 111. S/113 LINE 1111 Y -- 11.466X -- 23.3MV

DEVIATION OF SLOPE FROM IDEAL IS: -1.0162
 OFFSET IS: -23.3MV
 COEFFICIENT OF DETERMINATION IS: RXX2= .99998820
 ANNOY INPUT DURING DC RESTORE IS: 64.2MV

REF: 111. S/113 LINE 1111 Y -- 11.466X -- 23.3MV

TO: 111. S/113 LINE 1111 Y -- 11.466X -- 23.3MV

| MAXIMUM | THRESHOLD | AVERAGE | MINIMUM | THRESHOLD | STANDARD DEVIATION |
|---------|-----------|----------|---------|-----------|--------------------|
| 11.1MV | 193 | 15.530MV | -0.1MV | 192 | 4.638MV |

TO: 111. S/113 LINE 1111 Y -- 11.466X -- 23.3MV

| MAXIMUM | THRESHOLD | AVERAGE | MINIMUM | THRESHOLD | STANDARD DEVIATION |
|---------|-----------|----------|---------|-----------|--------------------|
| 1.2MV | 20 | -0.027MV | -5.5MV | 220 | 1.008MV |

TO: 111. S/113 LINE 1111 Y -- 11.466X -- 23.3MV

| MAXIMUM | THRESHOLD | AVERAGE | MINIMUM | THRESHOLD | STANDARD DEVIATION |
|---------|-----------|---------|---------|-----------|--------------------|
| 14.1MV | 212 | 0.345MV | -2.4MV | 119 | 4.017MV |

TEST FAILED

*Test failed per FR # F 4265 Rg 12/1/81
 See Q.C.H.R. Sheet #12 Line #15*

DEC 01 81

ORIGINAL PAGE IS
 OF POOR QUALITY

HS-235 THEMATIC MAPPER MUX UNIT TEST MODEL 111 S/N 3 PAGE 55B
 1981/12/01 16:06:42 FINALLY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 3.5.11.5-H AND THRESHOLD TEST (HAND= 6, SENSOR=1)

HAC
TEST
S27

THRESHOLD AND OUTPUT IDEAL ANALOG INPUT VOLTAGE (MV) INCREASE FROM PREV BEST FIT STRAIGHT LINE
 NUMBER THRESHOLD VALUE LEVELS RATIO- 1:1 THRESHOLD POINT DEVIATION
 (MV) NOMINAL LOWER UPPER

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | | |
|----|-----------|---------|-------|------|------|------|-------|-------|
| 1 | 1111 1111 | -24.375 | -17.8 | -0.2 | -1.1 | | -7.9 | -10.0 |
| 2 | 1111 1110 | -8.750 | 0.7 | 1.0 | 0.9 | 18.4 | 7.6 | -6.9 |
| 3 | 1111 1101 | 6.875 | 16.3 | 1.2 | 1.2 | 15.5 | 23.1 | -6.8 |
| 4 | 1111 1100 | 22.500 | 35.9 | -1.4 | -1.4 | 19.6 | 38.5 | -2.6 |
| 5 | 1111 1011 | 38.125 | 48.0 | -1.2 | -1.3 | 12.1 | 54.0 | -6.0 |
| 6 | 1111 1010 | 53.750 | 67.3 | 1.0 | -0.1 | 19.2 | 69.5 | -2.2 |
| 7 | 1111 1001 | 69.375 | 82.0 | 1.1 | 1.1 | 14.7 | 84.9 | -3.0 |
| 8 | 1111 1000 | 85.000 | 96.2 | -0.1 | 0.5 | 14.2 | 100.4 | -4.2 |
| 9 | 1111 0111 | 100.625 | 108.4 | -1.1 | -1.1 | 12.2 | 115.9 | -7.4 |
| 10 | 1111 0110 | 116.250 | 130.1 | -0.9 | -0.9 | 21.7 | 131.3 | -1.2 |
| 11 | 1111 0101 | 131.875 | 142.4 | 1.2 | 1.1 | 12.3 | 146.8 | -4.4 |
| 12 | 1111 0100 | 147.500 | 163.3 | 1.2 | 1.2 | 20.9 | 162.3 | 1.1 |
| 13 | 1111 0011 | 163.125 | 174.1 | -1.2 | 0.0 | 10.7 | 177.7 | -3.7 |
| 14 | 1111 0010 | 178.750 | 196.6 | -1.1 | -1.1 | 22.5 | 193.2 | 3.4 |
| 15 | 1111 0001 | 194.375 | 209.0 | 0.0 | -1.0 | 12.4 | 208.7 | 0.3 |
| 16 | 1111 0000 | 210.000 | 230.8 | 1.1 | 1.1 | 11.7 | 224.1 | -3.4 |
| 17 | 1110 1111 | 225.625 | 231.9 | 1.1 | 1.1 | 11.1 | 239.6 | -7.7 |
| 18 | 1110 1110 | 241.250 | 253.2 | -1.0 | -0.9 | 21.3 | 255.1 | -1.9 |
| 19 | 1110 1101 | 256.875 | 268.2 | -1.2 | -1.2 | 15.0 | 270.5 | -2.3 |
| 20 | 1110 1100 | 272.500 | 288.2 | 1.2 | -0.0 | 20.0 | 286.6 | 2.2 |
| 21 | 1110 1011 | 288.125 | 297.4 | 1.1 | 1.1 | 9.1 | 301.5 | -4.1 |
| 22 | 1110 1010 | 303.750 | 310.6 | -0.0 | 1.0 | 21.2 | 316.9 | 1.6 |
| 23 | 1110 1001 | 319.375 | 333.6 | -1.2 | -1.2 | 15.0 | 332.4 | 1.2 |
| 24 | 1110 1000 | 335.000 | 350.4 | -0.1 | -0.2 | 16.8 | 347.9 | 2.5 |
| 25 | 1110 0111 | 350.625 | 357.7 | 1.1 | 1.1 | 7.3 | 363.3 | -5.7 |

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7 DEC 0 1 '81

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1-236 THEMATIC MATTER BOX UNIT TEST MODEL.. FLT. S/N 3 PAGE 560

81/12/01 16:06:42 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

TEST=1-4 A/D THRESHOLD TEST CHAN= 6, SENSOR=1



DEC 01 '91

| THRESHOLD
LOWER | A/D
THRESHOLD | DIGITAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--------------------|------------------|--------------------------|---------------------------|-----------------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS
LOWER | UPPER | | POINT | DEVIATION |
| 52 | 1100 1100 | 772.500 | 786.4 | -1.3 | -1.3 | 20.9 | 780.9 | 5.5 |
| 53 | 1100 1011 | 788.125 | 794.3 | 1.1 | 1.1 | 7.9 | 796.4 | -2.1 |
| 54 | 1100 1010 | 803.750 | 814.4 | 0.9 | 0.9 | 20.1 | 811.9 | 2.5 |
| 55 | 1100 1001 | 819.375 | 830.1 | -1.1 | -0.0 | 15.6 | 827.3 | 2.7 |
| 56 | 1100 1000 | 835.000 | 848.8 | -0.8 | -0.8 | 18.7 | 842.8 | 6.0 |
| 57 | 1100 0111 | 850.625 | 855.9 | -0.0 | -1.2 | 6.2 | 858.3 | -3.3 |
| 58 | 1100 0110 | 866.250 | 875.2 | 1.1 | 1.0 | 20.7 | 873.7 | 1.5 |
| 59 | 1100 0101 | 881.875 | 888.5 | 1.1 | 1.1 | 13.3 | 889.7 | -0.7 |
| 60 | 1100 0100 | 897.500 | 913.2 | -1.2 | -1.3 | 24.7 | 904.7 | 8.5 |
| 61 | 1100 0011 | 913.125 | 919.4 | -1.0 | -1.0 | 6.2 | 920.1 | -0.7 |
| 62 | 1100 0010 | 928.750 | 940.8 | 0.8 | -0.1 | 21.4 | 935.6 | 5.2 |
| 63 | 1100 0001 | 944.375 | 952.9 | 1.0 | 1.0 | 12.7 | 951.1 | 1.9 |
| 64 | 1100 0000 | 960.000 | 965.3 | 0.0 | 1.0 | 12.3 | 966.5 | -1.3 |
| 65 | 1011 1111 | 975.625 | 981.2 | -1.2 | -1.2 | 15.9 | 982.0 | -0.8 |
| 66 | 1011 1110 | 991.250 | 998.6 | -1.0 | -1.0 | 17.4 | 997.5 | 1.1 |
| 67 | 1011 1101 | 1006.88 | 1014.7 | 1.2 | 1.1 | 16.1 | 1012.9 | 1.7 |
| 68 | 1011 1100 | 1022.50 | 1030.0 | 1.2 | 1.1 | 15.3 | 1028.4 | 1.6 |
| 69 | 1011 1011 | 1038.13 | 1045.7 | -1.1 | 0.0 | 15.7 | 1043.9 | 1.9 |
| 70 | 1011 1010 | 1053.75 | 1064.1 | -1.1 | -1.1 | 18.4 | 1059.3 | 4.8 |
| 71 | 1011 1001 | 1069.38 | 1080.3 | 0.0 | -1.1 | 16.2 | 1074.8 | 5.5 |
| 72 | 1011 1000 | 1085.00 | 1090.9 | 0.6 | 0.6 | 10.6 | 1090.3 | 0.6 |
| 73 | 1011 0111 | 1100.63 | 1104.1 | 1.1 | 1.1 | 13.2 | 1105.7 | -1.6 |
| 74 | 1011 0110 | 1116.25 | 1124.8 | -0.9 | -0.9 | 20.7 | 1121.2 | 3.6 |
| 75 | 1011 0101 | 1131.88 | 1139.8 | -1.1 | -1.1 | 15.0 | 1136.7 | 3.1 |
| 76 | 1011 0100 | 1147.50 | 1158.8 | 1.1 | 0.0 | 19.1 | 1152.1 | 6.7 |
| 77 | 1011 0011 | 1163.13 | 1168.5 | 1.1 | 1.1 | 9.6 | 1167.6 | 0.9 |
| 78 | 1011 0010 | 1178.75 | 1189.1 | 0.0 | 0.9 | 20.6 | 1183.1 | 6.1 |

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236 THERMALIC MATHUR MIX UNIT TEST MODEL .. FLT. S/N 3 PAGE 562

1/12/01 16:06:42 MINALITY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

1.3.1-17 AND THRESHOLD TEST (HARD= 6 SENSOR=1)



DL 01 81

| SHOULD AND OUTPUT
MEET THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|-------------------------------------|------------------------|---------------------------|--------|---------|-------|------------------------------------|------------------------|-----------|
| | | LEVELS RATIO= 1 : 1 | | NOMINAL | LOWER | UPPER | POINT | DEVIATION |
| 05 | 1001 0111 | 1600.63 | 1595.5 | 1.1 | 1.1 | 11.5 | 1600.6 | -5.2 |
| 06 | 1001 0110 | 1616.25 | 1614.3 | 0.1 | 0.9 | 18.8 | 1616.1 | -1.8 |
| 07 | 1001 0101 | 1631.88 | 1631.1 | -1.1 | -1.1 | 16.8 | 1631.6 | -0.5 |
| 08 | 1001 0100 | 1647.50 | 1651.4 | -1.2 | -1.2 | 20.3 | 1647.0 | 4.3 |
| 09 | 1001 0011 | 1663.13 | 1659.6 | 1.1 | 1.1 | 8.2 | 1662.5 | -2.9 |
| 10 | 1001 0010 | 1678.75 | 1679.4 | 0.9 | 1.0 | 19.8 | 1678.0 | 1.4 |
| 11 | 1001 0001 | 1694.38 | 1695.2 | -1.1 | -0.0 | 15.8 | 1693.4 | 1.8 |
| 12 | 1001 0000 | 1710.00 | 1711.9 | -1.2 | -1.2 | 16.7 | 1708.9 | 3.0 |
| 13 | 1000 1111 | 1725.63 | 1718.9 | 0.0 | -1.1 | 6.9 | 1724.4 | -5.5 |
| 14 | 1000 1110 | 1741.25 | 1735.0 | 1.0 | 1.0 | 16.1 | 1739.8 | -4.9 |
| 15 | 1000 1101 | 1756.88 | 1752.2 | 1.1 | 1.1 | 17.2 | 1755.3 | -3.1 |
| 16 | 1000 1100 | 1772.50 | 1771.0 | -1.1 | -1.2 | 18.8 | 1770.8 | 1.2 |
| 17 | 1000 1011 | 1788.13 | 1783.0 | -1.1 | -1.1 | 12.0 | 1786.2 | -3.3 |
| 18 | 1000 1010 | 1803.75 | 1800.1 | 1.0 | -0.0 | 17.1 | 1801.7 | -1.6 |
| 19 | 1000 1001 | 1819.38 | 1816.4 | 1.2 | 1.2 | 16.3 | 1817.2 | -0.8 |
| 20 | 1000 1000 | 1835.00 | 1833.5 | -0.1 | -0.1 | 17.1 | 1832.6 | 0.9 |
| 21 | 1000 0111 | 1850.63 | 1842.2 | -1.2 | -1.1 | 8.7 | 1848.1 | -5.9 |
| 22 | 1000 0110 | 1866.25 | 1861.5 | -0.9 | -1.0 | 19.3 | 1863.6 | -2.1 |
| 23 | 1000 0101 | 1881.88 | 1875.6 | 1.1 | 1.1 | 14.1 | 1879.0 | -3.5 |
| 24 | 1000 0100 | 1897.50 | 1896.0 | 1.1 | 1.0 | 20.4 | 1894.5 | 1.5 |
| 25 | 1000 0011 | 1913.13 | 1906.2 | -1.1 | -0.1 | 10.2 | 1910.0 | -3.8 |
| 26 | 1000 0010 | 1928.75 | 1926.5 | -1.0 | -1.0 | 20.3 | 1925.4 | 1.1 |
| 27 | 1000 0001 | 1944.38 | 1940.7 | 0.0 | -1.1 | 14.1 | 1940.9 | -0.2 |
| 28 | 1000 0000 | 1960.00 | 1962.7 | 0.8 | 0.9 | 22.0 | 1956.4 | 6.3 |
| 29 | 0111 1111 | 1975.63 | 1970.6 | 1.2 | 1.2 | 7.9 | 1971.8 | -1.3 |
| 30 | 0111 1110 | 1991.25 | 1989.9 | -1.0 | -1.0 | 19.3 | 1987.3 | 2.6 |

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6 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 564
12/01 16:06:42 FINALITY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

13-1-11 A/D THRESHOLD TEST CHAND= 4, SENSOR=1



DEC 01 '81

HS-2
1981
3.5

| OLD A/D OUTPUT
FR THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | THRESH
NUM |
|--------------------------------|------------------------|---------------------------|----------------------------|-------|------------------------------------|------------------------|-----------|---------------|
| | | NOMINAL | LEVELS RATIO= 1:1
LOWER | UPPER | | POINT | DEVIATION | |
| 0110 0010 | 2428.75 | 2427.0 | -1.0 | -0.9 | 22.9 | 2420.4 | 6.7 | 7 |
| 0110 0001 | 2444.38 | 2439.7 | -1.1 | -2.4 | 12.6 | 2435.8 | 3.9 | 8 |
| 0110 0000 | 2440.00 | 2441.8 | 0.4 | 0.0 | 2.2 | 2451.3 | -9.5 | 8 |
| 0101 1111 | 2475.63 | 2461.6 | 1.1 | 1.1 | 19.7 | 2466.8 | -5.2 | 8 |
| 0101 1110 | 2491.25 | 2478.9 | 0.0 | 0.9 | 12.3 | 2482.2 | -3.3 | 8 |
| 0101 1101 | 2506.88 | 2497.2 | -1.1 | -1.1 | 18.3 | 2497.7 | -0.5 | 8 |
| 0101 1100 | 2522.50 | 2516.8 | -0.4 | -0.4 | 19.6 | 2513.2 | 3.6 | 8 |
| 0101 1011 | 2538.13 | 2525.8 | 1.2 | 1.1 | 9.0 | 2528.6 | -7.9 | 8 |
| 0101 1010 | 2553.75 | 2543.9 | 1.0 | 1.0 | 18.1 | 2544.1 | -0.2 | 8 |
| 0101 1001 | 2569.38 | 2561.4 | -1.1 | -0.0 | 12.5 | 2559.6 | 1.8 | 8 |
| 0101 1000 | 2585.00 | 2571.5 | -0.8 | -0.8 | 10.1 | 2575.0 | -3.5 | 8 |
| 0101 0111 | 2600.63 | 2586.3 | 0.0 | -1.1 | 14.8 | 2590.5 | -4.2 | 9 |
| 0101 0110 | 2616.25 | 2604.6 | 1.0 | 0.9 | 18.3 | 2606.0 | -1.4 | 9 |
| 0101 0101 | 2631.88 | 2619.7 | 1.1 | 1.0 | 15.1 | 2621.4 | -1.7 | 9 |
| 0101 0100 | 2647.50 | 2642.2 | -1.0 | -1.1 | 22.5 | 2636.9 | 5.3 | 9 |
| 0101 0011 | 2663.13 | 2650.4 | -1.1 | -1.1 | 8.2 | 2652.4 | -2.0 | 9 |
| 0101 0010 | 2678.75 | 2669.7 | 0.9 | 0.0 | 19.3 | 2667.8 | 1.9 | 9 |
| 0101 0001 | 2694.38 | 2683.8 | 1.1 | 1.0 | 14.1 | 2683.3 | 0.5 | 9 |
| 0101 0000 | 2710.00 | 2693.9 | -0.1 | 1.1 | 10.1 | 2698.8 | -4.9 | 9 |
| 0100 1111 | 2725.63 | 2708.7 | -1.1 | -1.2 | 14.8 | 2714.2 | -5.5 | 9 |
| 0100 1110 | 2741.25 | 2726.4 | -0.9 | -0.9 | 12.7 | 2729.7 | -3.3 | 9 |
| 0100 1101 | 2756.88 | 2742.1 | 1.1 | 1.0 | 15.7 | 2745.2 | -3.0 | 10 |
| 0100 1100 | 2772.50 | 2760.1 | 1.2 | 1.1 | 12.9 | 2760.6 | -0.5 | 10 |
| 0100 1011 | 2788.13 | 2772.8 | -1.0 | 0.0 | 12.7 | 2776.1 | -3.3 | 10 |
| 0100 1010 | 2803.75 | 2791.5 | -0.9 | -0.9 | 18.2 | 2791.6 | -0.0 | 10 |
| 0100 1001 | 2819.38 | 2807.3 | -0.0 | -1.0 | 15.8 | 2807.0 | 0.3 | 10 |

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THEMATIC NOTCH MIX UNIT TEST MODEL... ECU. S/N 3 PAGE 565
 201 16:06:42 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 16.06.42 16.06.42 16.06.42 16.06.42 16.06.42 16.06.42 16.06.42 16.06.42

HAC
TEST
S27

Dec 01 '81

HS-2
1981
111

| D A/D OUTPUT
THRESHOLD | IDEAL
VOLTAGE
(V) | ANALOG INPUT VOLTAGE (V) | | GAIN
1:1
DIFFER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | THRESH
NUMBER |
|---------------------------|-------------------------|--------------------------|-------|-----------------------|------------------------------------|------------------------|-----------|------------------|
| | | NOMINAL | LOWER | | | POINT | DEVIATION | |
| 0100 1000 | 2822.10 | 2820.2 | 0.2 | 0.3 | 12.8 | 2822.5 | -2.3 | |
| 0100 0111 | 2822.63 | 2831.1 | 1.1 | 1.1 | 10.9 | 2828.0 | -6.9 | 102 |
| 0100 0110 | 2866.21 | 2872.1 | -1.0 | 0.9 | 21.0 | 2853.4 | -1.4 | 103 |
| 0100 0101 | 2866.21 | 2866.7 | -1.1 | -1.1 | 14.6 | 2868.9 | -2.2 | 102 |
| 0100 0100 | 2897.10 | 2881.8 | 0.8 | -1.6 | 19.1 | 2894.4 | 1.5 | 105 |
| 0100 0011 | 2913.13 | 2895.2 | 1.1 | 1.1 | 9.4 | 2899.8 | -4.6 | 104 |
| 0100 0010 | 2913.71 | 2916.5 | -0.1 | 0.9 | 21.2 | 2915.3 | 1.2 | 110 |
| 0100 0001 | 2944.38 | 2925.9 | -0.4 | 0.5 | 0.4 HAC | 2930.7 | -4.9 | 111 |
| 0100 0000 | 2944.00 | 2925.8 | -0.4 | -0.4 | -0.1 TH | 2946.2 | -20.4 | 112 |
| 0011 1111 | 2975.63 | 2956.9 | 1.1 | 1.2 | 21.1 | 2961.7 | -4.8 | 113 |
| 0011 1110 | 2991.21 | 2973.6 | 1.0 | 1.8 | 16.7 | 2977.1 | -3.5 | 114 |
| 0011 1101 | 3008.38 | 2992.7 | -1.1 | 0.0 | 19.1 | 2992.6 | 0.1 | 115 |
| 0011 1100 | 3012.10 | 3009.4 | -0.8 | -0.2 | 16.6 | 3008.1 | 1.3 | 116 |
| 0011 1011 | 3022.13 | 3022.6 | -0.1 | -1.2 | 13.2 | 3023.5 | -0.9 | 117 |
| 0011 1010 | 3033.71 | 3030.9 | 1.0 | 0.9 | 16.3 | 3039.0 | -0.1 | 118 |
| 0011 1001 | 3049.38 | 3056.2 | 1.1 | 1.1 | 12.2 | 3054.5 | 1.7 | 119 |
| 0011 1000 | 3055.00 | 3063.6 | -1.1 | 1.1 | 7.5 | 3069.9 | -6.1 | 120 |
| 0011 0111 | 3100.63 | 3082.3 | -1.1 | 1.2 | 18.6 | 3085.4 | -0.2 | 121 |
| 0011 0110 | 3116.21 | 3100.1 | 0.9 | -0.1 | 12.8 | 3100.9 | -0.8 | 122 |
| 0011 0101 | 3131.88 | 3115.2 | 1.1 | 1.1 | 15.8 | 3116.3 | -0.5 | 123 |
| 0011 0100 | 3142.10 | 3135.1 | -0.0 | 1.1 | 19.7 | 3131.8 | 3.3 | 124 |
| 0011 0011 | 3155.13 | 3146.8 | -1.1 | -0.1 | 11.2 | 3147.3 | -0.4 | 125 |
| 0011 0010 | 3163.71 | 3166.3 | -1.0 | 1.0 | 19.1 | 3162.7 | 3.6 | 126 |
| 0011 0001 | 3194.38 | 3180.4 | 1.0 | 1.1 | 14.1 | 3178.2 | 2.2 | 127 |
| 0011 0000 | 3216.00 | 3185.5 | 1.2 | 1.3 | 5.1 | 3193.7 | -8.2 | 128 |
| 0010 1111 | 3225.63 | 3205.6 | 1.2 | 0.0 | 20.1 | 3209.1 | -3.6 | 129 |
| | | | | | | | | 130 |

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THERMATIC METER MUX UNIT TEST MODEL .. FLT. S/N 3 PAGE 566
 11 16:06:42 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 1.5-10 VOLT THRESHOLD TEST COORDINATE 2.5 SENSITIVITY



DEC 01 '80

HS-236
 1981/12
 11.17

| A/D OUTPUT
THRESHOLD | IDIAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | TOLERANCE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | | THRESHOLD
NUMBER |
|-------------------------|------------------------|---------------------------|-------|-------|-------------------------------------|------------------------|-----------|---------------------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION | |
| 0010 1110 | 3241.25 | 3222.6 | -1.0 | -1.0 | 17.0 | 3224.6 | -2.0 | 131 |
| 0010 1101 | 3256.88 | 3240.4 | -0.1 | -1.2 | 17.8 | 3240.1 | 0.3 | 132 |
| 0010 1100 | 3272.50 | 3260.3 | 0.6 | 0.7 | 19.9 | 3255.5 | 1.8 | 133 |
| 0010 1011 | 3288.13 | 3269.1 | 1.1 | 43.9 | 8.8 | 3271.0 | -1.9 | 134 |
| 0010 1010 | 3303.75 | 3288.2 | -0.9 | -1.0 | 19.0 | 3286.5 | 1.2 | 135 |
| 0010 1001 | 3319.38 | 3305.0 | -1.1 | -1.1 | 16.8 | 3301.9 | 3.1 | 136 |
| 0010 1000 | 3335.00 | 3313.4 | -0.3 | -0.0 | 8.4 | 3312.4 | -4.0 | 137 |
| 0010 0111 | 3350.63 | 3329.0 | 0.9 | 44.1 | 15.6 | 3332.9 | -3.9 | 138 |
| 0010 0110 | 3366.25 | 3348.3 | -0.0 | 0.9 | 19.3 | 3348.3 | -0.1 | 139 |
| 0010 0101 | 3381.88 | 3364.9 | -1.1 | -1.1 | 16.6 | 3363.8 | 1.1 | 140 |
| 0010 0100 | 3397.50 | 3387.0 | -5.5 | -1.0 | 22.1 | 3379.3 | 7.2 | 141 |
| 0010 0011 | 3413.13 | 3393.7 | 1.1 | 1.1 | 6.2 | 3394.7 | -1.1 | 142 |
| 0010 0010 | 3428.75 | 3414.0 | 0.9 | 1.0 | 20.3 | 3410.2 | 3.8 | 143 |
| 0010 0001 | 3444.38 | 3425.4 | -0.4 | -0.0 | 11.3 | 3425.7 | -0.3 | 144 |
| 0010 0000 | 3460.00 | 3425.4 | -0.3 | -0.4 | 0.0 | 3441.1 | -15.7 | 145 |
| 0001 1111 | 3475.63 | 3452.9 | -0.1 | -1.1 | 27.5 | 3456.6 | -3.2 | 146 |
| 0001 1110 | 3491.25 | 3467.4 | 0.9 | 1.0 | 14.1 | 3472.1 | -4.6 | 147 |
| 0001 1101 | 3506.88 | 3486.7 | -0.1 | 1.1 | 19.3 | 3487.5 | -0.8 | 148 |
| 0001 1100 | 3522.50 | 3504.4 | -0.2 | -0.2 | 17.2 | 3503.5 | 1.4 | 149 |
| 0001 1011 | 3538.13 | 3517.8 | -1.1 | -1.1 | 13.4 | 3518.5 | -0.6 | 150 |
| 0001 1010 | 3553.75 | 3533.3 | 0.8 | -0.1 | 15.5 | 3533.9 | -0.6 | 151 |
| 0001 1001 | 3569.38 | 3551.7 | 1.0 | 1.0 | 18.4 | 3549.4 | 2.3 | 152 |
| 0001 1000 | 3585.00 | 3558.2 | -0.1 | 0.2 | 6.5 | 3564.9 | 6.6 | 153 |
| 0001 0111 | 3600.63 | 3578.0 | -1.2 | -1.1 | 19.2 | 3580.3 | -2.4 | 154 |
| 0001 0110 | 3616.25 | 3597.6 | -0.1 | -0.9 | 17.6 | 3595.8 | 0.2 | 155 |
| 0001 0101 | 3631.88 | 3611.8 | 1.0 | 1.1 | 16.2 | 3611.3 | 0.5 | 156 |
| 0001 0100 | 3647.50 | 3624.8 | 0.9 | 0.8 | 13.0 | 3626.2 | -2.0 | 157 |

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| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 26 | 1110 0110 | 366.250 | 362.2 | -0.9 | -0.0 | 20.3 | 362.3 | -0.0 |
| 27 | 1110 0101 | 381.875 | 379.0 | -1.0 | -0.9 | 16.8 | 378.1 | 0.9 |
| 28 | 1110 0100 | 397.500 | 402.9 | -0.1 | -1.0 | 23.8 | 394.0 | 0.9 |
| 29 | 1110 0011 | 413.125 | 407.5 | 0.9 | 1.0 | 4.6 | 409.9 | -2.4 |
| 30 | 1110 0010 | 428.750 | 429.2 | -0.1 | 1.0 | 21.7 | 425.7 | 3.5 |
| 31 | 1110 0001 | 444.375 | 444.5 | -1.1 | -1.0 | 15.2 | 441.6 | 2.8 |
| 32 | 1110 0000 | 460.000 | 452.8 | -1.0 | -1.1 | 8.3 | 457.5 | -4.7 |
| 33 | 1101 1111 | 475.625 | 469.7 | 0.9 | 0.0 | 16.9 | 473.3 | -3.6 |
| 34 | 1101 1110 | 491.250 | 486.9 | 0.9 | 1.0 | 17.2 | 489.2 | -2.3 |
| 35 | 1101 1101 | 506.875 | 505.8 | -0.1 | 1.0 | 18.9 | 505.1 | 0.7 |
| 36 | 1101 1100 | 522.500 | 525.8 | -1.0 | -1.0 | 20.0 | 521.0 | 4.9 |
| 37 | 1101 1011 | 538.125 | 536.2 | 0.0 | -1.0 | 10.4 | 536.8 | -0.6 |
| 38 | 1101 1010 | 553.750 | 554.8 | 0.9 | 1.0 | 10.6 | 552.7 | 2.1 |
| 39 | 1101 1001 | 569.375 | 571.2 | 0.9 | 1.0 | 16.4 | 568.6 | 2.6 |
| 40 | 1101 1000 | 585.000 | 586.8 | -1.0 | 0.0 | 15.6 | 584.4 | 2.4 |
| 41 | 1101 0111 | 600.625 | 598.1 | -1.0 | -0.9 | 11.3 | 600.3 | -2.2 |
| 42 | 1101 0110 | 616.250 | 617.0 | -0.1 | -1.1 | 18.8 | 616.2 | 0.8 |
| 43 | 1101 0101 | 631.875 | 633.1 | 1.0 | 1.0 | 16.1 | 632.0 | 1.0 |
| 44 | 1101 0100 | 647.500 | 644.9 | -0.0 | 1.0 | 21.8 | 647.9 | 2.0 |
| 45 | 1101 0011 | 663.125 | 663.4 | -1.0 | -0.9 | 8.5 | 663.8 | -0.4 |
| 46 | 1101 0010 | 678.750 | 684.6 | -1.0 | -1.0 | 21.2 | 679.6 | 5.0 |
| 47 | 1101 0001 | 694.375 | 698.2 | 0.9 | 0.0 | 13.6 | 695.5 | 2.7 |
| 48 | 1101 0000 | 710.000 | 716.3 | 1.1 | 1.1 | 18.0 | 711.4 | 4.9 |
| 49 | 1100 1111 | 725.625 | 724.3 | 0.0 | 1.0 | 8.1 | 727.3 | -2.9 |
| 50 | 1100 1110 | 741.250 | 742.5 | -1.1 | -1.1 | 18.2 | 743.1 | -0.6 |
| 51 | 1100 1101 | 756.875 | 761.0 | 0.0 | -0.9 | 18.5 | 759.0 | 2.1 |

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OF POOR QUALITY

HS-235 THERMATIC BUFFER MUX UNIT TEST MODEL... FLI. S/N 3 PAGE 521
 1981/12/01 16:13:19 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS
 CHANNEL = 2 SENSITIVITY = 1



| THRESHOLD AND OUTPUT | | DC IN
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|----------------------|-----------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| NUMBER | THRESHOLD | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 52 | 1100 1100 | 772.500 | 781.9 | 1.0 | 1.0 | 20.8 | 774.9 | 2.0 |
| 53 | 1100 1011 | 788.125 | 789.4 | 0.9 | 0.9 | 7.5 | 790.7 | -1.3 |
| 54 | 1100 1010 | 803.750 | 810.1 | -1.0 | 0.0 | 20.7 | 805.6 | 3.5 |
| 55 | 1100 1001 | 819.375 | 826.2 | -1.0 | -0.9 | 16.1 | 822.5 | 1.7 |
| 56 | 1100 1000 | 835.000 | 844.4 | -0.1 | -1.0 | 18.7 | 838.3 | 6.1 |
| 57 | 1100 0111 | 850.625 | 851.0 | 1.0 | 1.0 | 6.5 | 854.2 | -3.2 |
| 58 | 1100 0110 | 866.250 | 869.8 | -0.0 | 0.9 | 18.8 | 870.1 | -0.2 |
| 59 | 1100 0101 | 881.875 | 887.7 | -1.0 | -0.9 | 17.9 | 885.9 | 1.8 |
| 60 | 1100 0100 | 897.500 | 911.6 | -1.1 | 1.1 | 23.9 | 901.8 | 9.8 |
| 61 | 1100 0011 | 913.125 | 916.0 | 1.0 | 0.0 | 4.3 | 917.7 | -1.7 |
| 62 | 1100 0010 | 928.750 | 937.2 | 1.0 | 1.0 | 21.3 | 933.6 | 3.7 |
| 63 | 1100 0001 | 944.375 | 951.5 | -0.1 | 1.0 | 14.3 | 949.4 | 2.1 |
| 64 | 1100 0000 | 960.000 | 964.2 | -1.1 | -1.2 | 12.7 | 965.3 | -1.0 |
| | | | | | | | | |
| 65 | 1011 1111 | 975.625 | 979.8 | 0.0 | 0.9 | 15.6 | 981.7 | -1.3 |
| 66 | 1011 1110 | 991.250 | 995.5 | 1.1 | 1.0 | 15.7 | 997.0 | -1.5 |
| 67 | 1011 1101 | 1006.875 | 1019.9 | 1.0 | 1.0 | 24.3 | 1012.9 | 2.0 |
| 68 | 1011 1100 | 1022.500 | 1034.3 | -1.0 | 0.0 | 14.4 | 1028.8 | 5.5 |
| 69 | 1011 1011 | 1038.125 | 1044.9 | -1.0 | 1.0 | 10.5 | 1044.6 | 0.2 |
| 70 | 1011 1010 | 1053.750 | 1063.5 | 0.0 | -1.0 | 18.7 | 1060.5 | 3.0 |
| 71 | 1011 1001 | 1069.375 | 1079.6 | 0.9 | 1.0 | 16.0 | 1076.4 | 3.2 |
| 72 | 1011 1000 | 1085.000 | 1091.7 | 0.0 | 1.0 | 12.2 | 1092.2 | -0.5 |
| 73 | 1011 0111 | 1100.625 | 1106.4 | -1.0 | -1.0 | 14.7 | 1108.1 | -1.7 |
| 74 | 1011 0110 | 1116.250 | 1124.7 | -1.0 | -1.0 | 18.2 | 1124.0 | 0.7 |
| 75 | 1011 0101 | 1131.875 | 1144.2 | -2.3 | 2.4 | 19.6 | 1139.9 | 4.4 |
| 76 | 1011 0100 | 1147.500 | 1162.1 | 1.0 | 1.0 | 17.9 | 1155.7 | 6.4 |
| 77 | 1011 0011 | 1163.125 | 1176.2 | -0.0 | 0.9 | 8.1 | 1171.6 | -1.4 |
| 78 | 1011 0010 | 1178.750 | 1192.3 | -1.0 | -1.0 | 22.1 | 1187.5 | 4.9 |

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HS-236 THE AUTO. MODEM MUX UNIT TEST MODEL.. FIT. S/N 3 PAGE 572
 1981/12/01 16:13:19 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

TESTING AND THRESHOLD TEST (HAND= 7, SENSOR=1)

HAC
TEST
527

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | TOTAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 79 | 1011 0001 | 1194.38 | 1206.8 | 0.0 | -1.0 | 14.5 | 1203.3 | 3.5 |
| 80 | 1011 0000 | 1210.00 | 1219.4 | 1.0 | 1.0 | 12.6 | 1219.2 | 0.2 |
| 81 | 1010 1111 | 1225.63 | 1231.8 | 1.0 | 0.9 | 12.5 | 1235.1 | -3.2 |
| 82 | 1010 1110 | 1241.25 | 1249.5 | -1.0 | -0.0 | 12.7 | 1250.9 | -1.4 |
| 83 | 1010 1101 | 1256.88 | 1273.6 | -1.0 | -1.0 | 24.1 | 1266.8 | 6.8 |
| 84 | 1010 1100 | 1272.50 | 1290.2 | -0.0 | -1.0 | 16.5 | 1282.7 | 7.5 |
| 85 | 1010 1011 | 1288.13 | 1296.6 | 1.0 | 1.1 | 6.4 | 1298.5 | -2.0 |
| 86 | 1010 1010 | 1303.75 | 1315.4 | 0.0 | 1.1 | 10.8 | 1314.4 | 1.0 |
| 87 | 1010 1001 | 1319.38 | 1333.2 | -1.0 | -0.9 | 12.8 | 1330.3 | 2.9 |
| 88 | 1010 1000 | 1335.00 | 1350.5 | -0.8 | -1.0 | 12.3 | 1346.2 | 4.4 |
| 89 | 1010 0111 | 1350.63 | 1358.0 | 1.1 | 0.0 | 7.4 | 1362.0 | -4.0 |
| 90 | 1010 0110 | 1366.25 | 1376.4 | 1.0 | 1.0 | 10.4 | 1377.9 | -1.0 |
| 91 | 1010 0101 | 1381.88 | 1399.2 | -0.0 | 1.0 | 22.9 | 1393.8 | 5.5 |
| 92 | 1010 0100 | 1397.50 | 1418.9 | -1.0 | -1.1 | 19.6 | 1409.6 | 9.3 |
| 93 | 1010 0011 | 1413.13 | 1423.7 | -0.1 | -0.9 | 4.9 | 1425.5 | -1.8 |
| 94 | 1010 0010 | 1428.75 | 1443.5 | 1.1 | 1.1 | 19.8 | 1441.4 | 2.2 |
| 95 | 1010 0001 | 1444.38 | 1458.3 | 1.0 | 1.1 | 14.7 | 1457.2 | 1.1 |
| 96 | 1010 0000 | 1460.00 | 1473.7 | -1.0 | 0.0 | 13.4 | 1473.1 | 0.6 |
| 97 | 1001 1111 | 1475.63 | 1485.4 | -0.5 | -0.9 | 11.7 | 1489.0 | -3.5 |
| 98 | 1001 1110 | 1491.25 | 1501.8 | -0.0 | -1.1 | 16.4 | 1504.8 | -3.0 |
| 99 | 1001 1101 | 1506.88 | 1525.2 | 1.0 | 0.9 | 23.3 | 1520.7 | 4.4 |
| 100 | 1001 1100 | 1522.50 | 1539.0 | 0.1 | 1.1 | 13.8 | 1536.6 | 2.4 |
| 101 | 1001 1011 | 1538.13 | 1550.3 | -1.1 | -1.0 | 11.3 | 1552.5 | -2.1 |
| 102 | 1001 1010 | 1553.75 | 1568.6 | -1.0 | -1.1 | 18.3 | 1568.3 | 0.3 |
| 103 | 1001 1001 | 1569.38 | 1584.9 | 1.0 | 0.0 | 15.3 | 1584.2 | 0.7 |
| 104 | 1001 1000 | 1585.00 | 1598.8 | 1.0 | 1.1 | 13.9 | 1600.1 | -1.3 |

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| SENSOR
NUMBER | AND
THRESHOLD | OUTPUT
THRESHOLD | IDEAL
VOLTAGE
(KV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|------------------|------------------|---------------------|--------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | | NORMAL | LOWER | UPPER | | POINT | DEVIATION |
| 131 | 0111 | 1101 | 2006.88 | 2030.4 | -3.9 | -0.0 | 21.2 | 2028.5 | 1.9 |
| 132 | 0111 | 1100 | 2022.50 | 2046.7 | 1.1 | 1.0 | 16.2 | 2044.4 | 2.3 |
| 133 | 0111 | 1011 | 2038.13 | 2055.3 | 0.0 | 1.1 | 8.6 | 2060.3 | -5.0 |
| 134 | 0111 | 1010 | 2053.75 | 2076.1 | -1.0 | -1.0 | 20.8 | 2076.1 | -0.1 |
| 135 | 0111 | 1001 | 2069.38 | 2091.8 | 0.0 | -1.0 | 15.7 | 2092.0 | -0.2 |
| 136 | 0111 | 1000 | 2085.00 | 2108.6 | 1.0 | 1.0 | 16.8 | 2107.9 | 0.7 |
| 137 | 0111 | 0111 | 2100.63 | 2116.0 | 1.0 | 1.0 | 8.7 | 2123.7 | -6.9 |
| 138 | 0111 | 0110 | 2116.25 | 2137.3 | -1.1 | -0.1 | 20.5 | 2139.6 | -2.3 |
| 139 | 0111 | 0101 | 2131.88 | 2153.1 | -1.0 | -1.0 | 15.7 | 2155.5 | -2.4 |
| 140 | 0111 | 0100 | 2147.50 | 2176.4 | 0.0 | -1.1 | 23.3 | 2171.4 | 5.1 |
| 141 | 0111 | 0011 | 2163.13 | 2181.7 | 0.9 | 1.0 | 5.2 | 2187.2 | -5.6 |
| 142 | 0111 | 0010 | 2178.75 | 2203.6 | -0.0 | 1.1 | 21.9 | 2203.1 | 0.5 |
| 143 | 0111 | 0001 | 2194.38 | 2218.2 | -1.0 | -1.0 | 14.6 | 2219.0 | -0.8 |
| 144 | 0111 | 0000 | 2210.00 | 2233.4 | -1.1 | -1.1 | 15.2 | 2234.8 | -1.4 |
| 145 | 0110 | 1111 | 2225.63 | 2243.4 | 1.1 | -0.0 | 10.0 | 2250.7 | -7.3 |
| 146 | 0110 | 1110 | 2241.25 | 2261.2 | 0.9 | 0.9 | 17.8 | 2266.6 | -5.4 |
| 147 | 0110 | 1101 | 2256.88 | 2284.3 | -0.9 | 0.1 | 23.1 | 2287.4 | 1.8 |
| 148 | 0110 | 1100 | 2272.50 | 2303.9 | -1.1 | -1.1 | 19.6 | 2298.3 | 5.6 |
| 149 | 0110 | 1011 | 2288.13 | 2309.2 | -0.0 | -1.0 | 5.3 | 2314.2 | -5.0 |
| 150 | 0110 | 1010 | 2303.75 | 2328.0 | 1.1 | 1.1 | 18.8 | 2330.0 | -2.1 |
| 151 | 0110 | 1001 | 2319.38 | 2343.5 | 1.1 | 1.1 | 15.5 | 2345.9 | -2.4 |
| 152 | 0110 | 1000 | 2335.00 | 2365.0 | -1.0 | -0.0 | 21.5 | 2361.8 | 3.2 |
| 153 | 0110 | 0111 | 2350.63 | 2370.6 | -1.0 | -1.0 | 5.6 | 2377.7 | -7.0 |
| 154 | 0110 | 0110 | 2366.25 | 2390.1 | 0.0 | -1.1 | 19.5 | 2393.5 | -3.4 |
| 155 | 0110 | 0101 | 2381.88 | 2404.6 | 1.1 | 1.1 | 14.5 | 2409.4 | -4.8 |
| 156 | 0110 | 0100 | 2397.50 | 2431.0 | 0.0 | 1.0 | 26.4 | 2425.3 | 5.8 |
| 157 | 0110 | 0011 | 2413.13 | 2435.4 | -1.0 | -1.0 | 4.3 | 2441.1 | -5.8 |

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DEC 01 '81

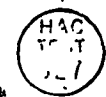
| REMOVED AND OUTPUT
NUMBER | ANALOG INPUT VOLTAGE (NO)
THRESHOLD | ANALOG INPUT VOLTAGE (NO)
NOMINAL | ANALOG INPUT VOLTAGE (NO)
LOWER | ANALOG INPUT VOLTAGE (NO)
UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|------------------------------|--|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------|-----------|
| | | | | | | POINT | DEVIATION |
| 153 | 0110 0010 | 2457.6 | 2457.6 | -1.0 | 1.0 | 2457.0 | 0.6 |
| 154 | 0110 0001 | 2464.36 | 2469.8 | 1.0 | 0.0 | 2472.9 | -8.1 |
| 155 | 0110 0000 | 2450.00 | 2484.5 | 0.9 | 1.0 | 2488.7 | -4.7 |
| 160 | 0101 1111 | 2491.53 | 2496.2 | 0.0 | 1.1 | 2504.6 | -8.5 |
| 161 | 0101 1110 | 2491.55 | 2514.7 | -1.1 | 1.2 | 2520.5 | -5.9 |
| 162 | 0101 1101 | 2506.88 | 2537.0 | -0.1 | 1.0 | 2536.3 | 0.7 |
| 163 | 0101 1100 | 2522.10 | 2532.9 | 1.1 | 1.2 | 2552.2 | 0.7 |
| 164 | 0101 1011 | 2533.13 | 2561.0 | 1.0 | 1.0 | 2568.1 | -7.0 |
| 165 | 0101 1010 | 2533.25 | 2585.6 | -1.1 | -0.0 | 2584.0 | 1.7 |
| 166 | 0101 1001 | 2533.36 | 2597.4 | -1.0 | -1.1 | 2599.8 | -2.4 |
| 167 | 0101 1000 | 2533.00 | 2619.1 | -4.9 | -1.0 | 2615.7 | 3.4 |
| 168 | 0101 0111 | 2600.63 | 2622.6 | 1.0 | 1.1 | 2631.6 | -9.0 |
| 169 | 0101 0110 | 2616.25 | 2641.7 | -0.0 | 1.0 | 2647.4 | -5.7 |
| 170 | 0101 0101 | 2621.58 | 2664.0 | -1.0 | -1.0 | 2663.3 | 0.7 |
| 171 | 0101 0100 | 2647.20 | 2682.4 | -1.1 | 1.1 | 2679.2 | 3.2 |
| 172 | 0101 0011 | 2653.13 | 2687.4 | 1.0 | -0.1 | 2691.0 | -7.6 |
| 173 | 0101 0010 | 2678.75 | 2708.7 | 1.0 | 1.1 | 2710.9 | -2.2 |
| 174 | 0101 0001 | 2694.38 | 2722.7 | 0.0 | 1.1 | 2726.8 | -4.1 |
| 175 | 0101 0000 | 2716.00 | 2744.6 | -1.1 | -1.1 | 2742.6 | 2.0 |
| 176 | 0100 1111 | 2725.65 | 2750.1 | 0.0 | -0.9 | 2758.5 | -8.4 |
| 177 | 0100 1110 | 2741.25 | 2766.5 | 1.1 | 1.1 | 2774.4 | -7.9 |
| 178 | 0100 1101 | 2756.88 | 2790.9 | -0.9 | -0.9 | 2790.3 | 0.7 |
| 179 | 0100 1100 | 2772.50 | 2812.3 | -1.1 | 0.1 | 2806.1 | 4.1 |
| 180 | 0100 1011 | 2788.13 | 2815.0 | -1.1 | -1.0 | 2827.0 | -7.0 |
| 181 | 0100 1010 | 2803.75 | 2834.4 | 0.0 | -1.0 | 2837.9 | -3.4 |
| 182 | 0100 1001 | 2819.38 | 2849.3 | 1.0 | 1.0 | 2853.7 | 4.4 |

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3A THEMATIC MAPPER DUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 576

7/12/01 16:13:19 PENALTY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

1. BATT AND THRESHOLD TEST (HAND= 7, SENSOR=1)



01010

| HOLD A/D OUTPUT
3-R THRESHOLD | ID-AL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|----------------------------------|------------------------|---------------------------|----------------------------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LEVELS RATIO= 1:1
LOWER | UPPER | | POINT | DEVIATION |
| 4 | 0100 1000 | 2835.00 | 2872.2 | -0.1 | 1.0 | 2869.6 | 2.6 |
| 5 | 0100 0111 | 2850.63 | 2876.6 | -1.0 | -1.1 | 2885.5 | -8.8 |
| 6 | 0100 0110 | 2866.25 | 2895.8 | -1.1 | -1.1 | 2901.3 | -5.6 |
| 7 | 0100 0101 | 2881.88 | 2916.1 | 1.1 | 0.0 | 2917.7 | -1.2 |
| 8 | 0100 0100 | 2897.50 | 2938.0 | 1.0 | 1.0 | 2933.1 | 4.9 |
| 9 | 0100 0011 | 2913.13 | 2940.4 | 0.0 | 1.0 | 2948.9 | -8.5 |
| 0 | 0100 0010 | 2928.75 | 2963.2 | -1.1 | -1.1 | 2964.8 | -1.6 |
| 1 | 0100 0001 | 2944.38 | 2976.9 | 0.0 | -1.0 | 2980.7 | -1.8 |
| 2 | 0100 0000 | 2960.00 | 2989.9 | 1.2 | 1.2 | 2996.6 | -6.7 |
| 3 | 0011 1111 | 2975.63 | 3003.6 | 1.1 | 1.1 | 3012.4 | -8.8 |
| 4 | 0011 1110 | 2991.25 | 3021.8 | -1.0 | -0.1 | 3028.3 | -6.5 |
| 5 | 0011 1101 | 3006.88 | 3046.8 | -1.1 | -1.0 | 3044.2 | 2.6 |
| 6 | 0011 1100 | 3022.50 | 3060.8 | 0.0 | -1.1 | 3060.0 | 0.7 |
| 7 | 0011 1011 | 3038.13 | 3068.8 | 1.0 | 1.0 | 3075.9 | -7.1 |
| 8 | 0011 1010 | 3053.75 | 3092.5 | -4.6 | 1.1 | 3091.8 | 0.7 |
| 9 | 0011 1001 | 3069.38 | 3105.6 | -0.9 | -0.8 | 3107.6 | -2.1 |
| 0 | 0011 1000 | 3085.00 | 3124.1 | -1.1 | -1.1 | 3123.5 | 0.6 |
| 1 | 0011 0111 | 3100.63 | 3130.8 | 1.0 | 0.0 | 3139.4 | -8.6 |
| 2 | 0011 0110 | 3116.25 | 3149.6 | 1.1 | 1.1 | 3155.2 | -1.7 |
| 3 | 0011 0101 | 3131.88 | 3171.5 | -0.1 | 1.1 | 3171.1 | 0.4 |
| 4 | 0011 0100 | 3147.50 | 3190.1 | -1.0 | -1.0 | 3187.0 | 3.1 |
| 5 | 0011 0011 | 3163.13 | 3197.0 | -0.1 | -1.1 | 3202.9 | -5.8 |
| 6 | 0011 0010 | 3178.75 | 3216.9 | 1.1 | 1.1 | 3218.7 | -1.8 |
| 7 | 0011 0001 | 3194.38 | 3238.1 | 1.0 | 1.1 | 3234.6 | 3.6 |
| 8 | 0011 0000 | 3210.00 | 3245.9 | -1.1 | 0.0 | 3250.5 | -4.6 |
| 9 | 0010 1111 | 3225.63 | 3259.3 | -1.1 | -1.0 | 3266.3 | -7.0 |

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7. THE MOTIC MODEL RAX UNIT TEST MODEL 1.1.1. S/N 3 PAGE 177

7.701 14:13:19 PENALTY TEST ACCEPTANCE CRAMMENT VOLTAGE MARGIN LOW BUS

7.701 14:13:19 PENALTY TEST ACCEPTANCE CRAMMENT VOLTAGE MARGIN LOW BUS



010101

| READ A/D OUTPUT
| A/D OUTPUT
THRESHOLD | IDEAL
VOLTAGE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|----------------------|-------------------------|--------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 0010 | 1110 | 3271.25 | 3276.6 | -0.1 | -1.1 | 17.4 | 3282.2 | -5.6 |
| 0010 | 1101 | 3256.88 | 3300.4 | -1.0 | -0.9 | 23.9 | 3296.1 | 2.4 |
| 0010 | 1100 | 3272.50 | 3317.9 | -0.0 | 1.1 | 17.4 | 3313.9 | 3.9 |
| 0010 | 1011 | 3288.13 | 3324.7 | -1.0 | -0.9 | 6.8 | 3329.8 | -5.1 |
| 0010 | 1010 | 3303.75 | 3347.5 | 0.0 | 0.1 | 22.8 | 3345.7 | 1.8 |
| 0010 | 1001 | 3319.38 | 3359.6 | 1.1 | 0.0 | 12.1 | 3361.5 | -1.9 |
| 0010 | 1000 | 3335.00 | 3380.3 | 1.0 | 1.2 | 20.7 | 3377.4 | 2.9 |
| 0010 | 0111 | 3350.63 | 3385.8 | 0.0 | 1.1 | 5.4 | 3393.3 | -7.5 |
| 0010 | 0110 | 3366.25 | 3405.9 | -1.1 | -1.0 | 20.1 | 3409.2 | -4.1 |
| 0010 | 0101 | 3381.88 | 3427.8 | -6.3 | -1.0 | 21.9 | 3425.0 | 2.7 |
| 0010 | 0100 | 3397.50 | 3447.6 | 1.1 | 1.2 | 19.8 | 3440.9 | 6.7 |
| 0010 | 0011 | 3413.13 | 3451.3 | 1.0 | 1.1 | 3.7 | 3456.8 | -5.5 |
| 0010 | 0010 | 3428.75 | 3473.7 | -1.1 | 0.0 | 22.4 | 3472.6 | 1.1 |
| 0010 | 0001 | 3444.38 | 3494.5 | -1.1 | -0.9 | 20.8 | 3488.5 | 6.0 |
| 0010 | 0000 | 3460.00 | 3505.7 | -0.0 | -1.1 | 11.2 | 3504.4 | 1.3 |
| 0001 | 1111 | 3475.63 | 3514.0 | 1.0 | 1.0 | 8.2 | 3520.2 | -6.3 |
| 0001 | 1110 | 3491.25 | 3536.6 | -5.8 | 1.2 | 22.6 | 3536.1 | 0.5 |
| 0001 | 1101 | 3506.88 | 3555.0 | -1.1 | -1.1 | 18.4 | 3552.0 | 3.1 |
| 0001 | 1100 | 3522.50 | 3571.9 | -1.1 | -1.0 | 16.9 | 3567.8 | 4.1 |
| 0001 | 1011 | 3538.13 | 3579.7 | 1.0 | 0.0 | 7.7 | 3583.7 | -4.0 |
| 0001 | 1010 | 3553.75 | 3583.2 | -3.7 | 1.1 | 23.5 | 3599.6 | 3.6 |
| 0001 | 1001 | 3569.38 | 3615.7 | -0.1 | 1.1 | 12.4 | 3615.5 | 0.2 |
| 0001 | 1000 | 3585.00 | 3639.1 | -1.2 | -1.2 | 23.4 | 3631.3 | 7.8 |
| 0001 | 0111 | 3590.63 | 3643.2 | -0.1 | -1.1 | 4.1 | 3647.2 | -4.0 |
| 0001 | 0110 | 3616.25 | 3660.9 | 0.9 | 1.0 | 17.7 | 3663.1 | -7.7 |
| 0001 | 0101 | 3631.88 | 3684.9 | -0.9 | -0.8 | 24.0 | 3673.9 | 5.9 |
| 0001 | 0100 | 3647.50 | 3702.3 | -1.2 | 0.0 | 17.4 | 3694.8 | 7.5 |

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36 THERMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 578
 12/01 14:13:19 FINALLY TEST ACCEPTANCE @ AMBIENT VOLTAGE MARGIN LOW BUS

1.1.5-14 AND THRESHOLD TEST CHARTS= 7. SENSITIVE



EL 01 '81

| RED AND OUTPUT
PER THRESHOLD | DIGITAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------------------|--------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 0001 0011 | 3663.13 | 3709.0 | -1.0 | -1.1 | 6.7 | 3710.7 | -1.7 |
| 0001 0010 | 3678.75 | 3729.8 | -0.1 | -1.0 | 20.8 | 3726.5 | 3.3 |
| 0001 0001 | 3694.38 | 3750.3 | 0.9 | 1.1 | 20.5 | 3742.4 | 7.9 |
| 0001 0000 | 3710.00 | 3767.5 | -0.1 | 1.1 | 17.2 | 3758.3 | 9.3 |
| 0000 1111 | 3725.63 | 3771.9 | -1.0 | -1.0 | 4.3 | 3774.1 | -2.3 |
| 0000 1110 | 3741.25 | 3788.9 | -1.2 | -1.1 | 17.0 | 3790.0 | -1.1 |
| 0000 1101 | 3756.88 | 3813.1 | -1.0 | 0.1 | 24.2 | 3805.9 | 7.2 |
| 0000 1100 | 3772.50 | 3831.4 | 1.0 | 1.1 | 18.3 | 3821.8 | 9.6 |
| 0000 1011 | 3788.13 | 3836.8 | -0.0 | 1.0 | 5.4 | 3837.6 | -0.8 |
| 0000 1010 | 3803.75 | 3876.9 | -1.2 | 3.7 | 20.1 | 3853.5 | 3.4 |
| 0000 1001 | 3819.38 | 3873.9 | -0.0 | -0.9 | 16.9 | 3869.4 | 4.5 |
| 0000 1000 | 3835.00 | 3896.2 | 1.0 | 1.1 | 22.3 | 3885.2 | 11.0 |
| 0000 0111 | 3850.63 | 3899.5 | 0.9 | 1.0 | 3.3 | 3901.1 | -1.6 |
| 0000 0110 | 3866.25 | 3919.3 | -1.1 | -0.0 | 19.8 | 3917.0 | 2.4 |
| 0000 0101 | 3881.88 | 3941.5 | -1.2 | -0.9 | 22.2 | 3932.8 | 8.7 |
| 0000 0100 | 3897.50 | 3963.8 | -0.1 | -1.1 | 22.3 | 3948.7 | 15.1 |
| 0000 0011 | 3913.13 | 3965.5 | 1.0 | 1.1 | 1.7 | 3964.6 | 1.0 |
| 0000 0010 | 3928.75 | 3986.8 | -0.2 | 1.1 | 21.2 | 3980.4 | 6.3 |
| 0000 0001 | 3944.38 | 4009.0 | -1.2 | -1.0 | 22.2 | 3996.3 | 12.7 |

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REVIEWED
PAGE 3 1-36
12/2/81



DEC 02 '81

TELEPHONIC MATTER BOX UNIT TEST MODEL 1. FLT. S/N 3 PAGE 1
702 02:49:26 FINALITY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN LOW TRUS
F. L. P. 11-11 0-000 0-000000-

2, 1702 1010 F0F0 10F0 F010 F010 F0F0 F0F0 F010 F010 F010 F010 F0F0 F0F0
1010 1020 853F 235C 1039 F018 6403 D58C 0809 081F F6C2 17A4
732B 4850 660Z 5013 C0F1 2041 4002 D7C8 119D 817AC 2199 87FC
4549 1213 1824 92D3 C1A1 F95F 392E 141A 3025 909Z D895 DC1D

3, 1807 9000 C034 3210 5F79 F1C2 A735 7565 4100 93D1 8518 CD7E 7A19
918A 2430 808C 1010 F010 F010 F010 F010 F010 F010 F010
1010 F025 F190 566E 910E 061F 613F 9600 5262 8161 D68A 6483
1230 3213 0004 5122 1134 9385 3911 77E0 F138 6189 03FD D60E

3A 2413 110D 3811 FFD2 8374 F627 153D F66Z 843E 015F D4CE 7D16 D2C3
1510 6A1C 6D13 B15C 3D0A 1682 76A2 3121 1805 10DF 51E3 58E5
9491 308C F0F0 F0F0 F0F0 F0F0 F010 F010 F010 F010 F0F0 F0F0
F010 F0F0 F0F0 F010 F0F0 F0F0 F010 F0F0 F010 F0F0 F010 F0F0

2, 0165 F010 F0F0 F010 F010 10F0 F010 F0F0 F010 F010 F010 F010 F0F0 F010 F0F0
1010 F010 1010 F0F0 F010 10F0 1010 1010 F010 F010 F0F0 F0F0
1010 F0F0 F010 F0F0 10F0 F0F0 F010 1010 F010 1010 F010 F010 F0F0
F0F0 1010 1010 1010 1010 1010 1010 F010 F010 F010 F0F0 1010 F0F0

3D, 1N CODE REFERENCE DATA 000

23 5081 841A 1864 0305 80AB 0901 11F6 C217 A423 2848 5066 075D 18C0
F32C 4140 020Z C811 9D88 0121 998Z 1047 4912 1318 2492 D3C1
A119 5139 21C4 1A7C 2390 97D8 950C 11D2 0256 FAE9 079C 0DCA
143Z 101F 791E C2A7 3525 6541 0993 D185 18C0 712A F99F 8A24

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7-1-11

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ORIGINAL PAGE 13
OF FOUR QUALITY

HS-2 16 THERMATIC METER BOX UNIT TEST MODEL 1111 S/N 3 PAGE 2
 1981/12/02 02:49:41 PENALTY ACCEPTANCE @ PRESENT TIME VOLTAGE MARGIN LOW LBS
 11111111111111111111



Dec 02 '81

| MAJOR
FRAME
NUMBER | MINOR FRAME NUMBER | | | | | | | | | | | | | | | |
|--------------------------|--------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 2 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 3 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 4 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 5 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 6 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 7 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 8 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 9 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 10 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |

TEST LOGGED BY DATA GIVE 241 3000 100%

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HAC
TST
9:7

4 7 2 0

| | | | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2038 | 1037 | 0226 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | FFFF | FFFF | FFFF | FFFF | FFFF | FFFF |
| | | | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | FFFF | FFFF | FFFF | FFFF | FFFF | FFFF |
| | | | FFFF | FFFF | FFFF | FFFF | FFFF | FFFF | FFFF | FFFF | FFFF | FFFF | FFFF | FFFF |
| | | | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | FFFF | FFFF | FFFF | FFFF | FFFF | FFFF |

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1981/12/02 02:00:15 FINALLY ACCEPTANCE @ ADJUTANT GEN. VOLTAGE MARGIN LOW BUS
 1981/12/02 02:00:15 FINALLY ACCEPTANCE @ ADJUTANT GEN. VOLTAGE MARGIN LOW BUS



SEC 02 '01

MAJOR FROM 1 TO 192

| MAJOR FROM | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 2 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 3 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 4 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 5 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 6 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 7 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 8 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 9 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 10 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 11 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 12 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |

PART 1 TEST PASSED, DATA OK, 11 D2 13 B4 05 26 B2 28 62 56 41 3C 2D 1E 0F

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2004 年
 10 月 11 日
 10 月 11 日

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|

[illegible]

FGRT 2 051 FGRT by DATA CRT F1 D2 C3 F4 A1 96 B7 78 69 5A 4B 3C 2D 1E 0F

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MAC
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 7. 11. 19

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|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| F | F | F | F | F | F | F | F | F | F | F | F | F | F | F | F |
| f | F | f | F | F | F | F | F | F | F | F | F | F | F | F | F |
| F | F | f | F | F | F | F | F | F | F | F | F | F | F | F | F |
| F | f | f | f | F | F | F | F | F | F | F | F | F | F | F | F |
| f | f | F | F | F | F | F | | | | | | | | | |

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P0K1  .  n 51 1055D:  L010 201  F1  D? C3 E4 A5 96 87 7d 69 56 4b 3c 2D 1F 0F

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|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 0A | 0B | 0C | 0D | 0E | 0F |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 1A | 1B | 1C | 1D | 1E | 1F |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 2A | 2B | 2C | 2D | 2E | 2F |
| 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 3A | 3B | 3C | 3D | 3E | 3F |
| 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 4A | 4B | 4C | 4D | 4E | 4F |
| 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 5A | 5B | 5C | 5D | 5E | 5F |
| 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 6A | 6B | 6C | 6D | 6E | 6F |
| 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 7A | 7B | 7C | 7D | 7E | 7F |
| 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 8A | 8B | 8C | 8D | 8E | 8F |
| 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 9A | 9B | 9C | 9D | 9E | 9F |
| AA | AB | AC | AD | AE | AF | AG | AH | AI | AJ | AK | AL | AM | AN | AO | AP |
| BA | BB | BC | BD | BE | BF | BG | BH | BI | BJ | BK | BL | BM | BN | BO | BP |
| CA | CB | CC | CD | CE | CF | CG | CH | CI | CJ | CK | CL | CM | CN | CO | CP |
| DA | DB | DC | DD | DE | DF | DG | DH | DI | DJ | DK | DL | DM | DN | DO | DP |
| EA | EB | EC | ED | EE | EF | EG | EH | EI | EJ | EK | EL | EM | EN | EO | EP |
| FA | FB | FC | FD | FE | FF | | | | | | | | | | |
| 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 0A | 0B | 0C | 0D | 0E | 0F |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 1A | 1B | 1C | 1D | 1E | 1F |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 2A | 2B | 2C | 2D | 2E | 2F |
| 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 3A | 3B | 3C | 3D | 3E | 3F |
| 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 4A | 4B | 4C | 4D | 4E | 4F |
| 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 5A | 5B | 5C | 5D | 5E | 5F |
| 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 6A | 6B | 6C | 6D | 6E | 6F |
| 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 7A | 7B | 7C | 7D | 7E | 7F |
| 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 8A | 8B | 8C | 8D | 8E | 8F |
| 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 9A | 9B | 9C | 9D | 9E | 9F |
| AA | AB | AC | AD | AE | AF | AG | AH | AI | AJ | AK | AL | AM | AN | AO | AP |
| BA | BB | BC | BD | BE | BF | BG | BH | BI | BJ | BK | BL | BM | BN | BO | BP |
| CA | CB | CC | CD | CE | CF | CG | CH | CI | CJ | CK | CL | CM | CN | CO | CP |
| DA | DB | DC | DD | DE | DF | DG | DH | DI | DJ | DK | DL | DM | DN | DO | DP |
| EA | EB | EC | ED | EE | EF | EG | EH | EI | EJ | EK | EL | EM | EN | EO | EP |
| FA | FB | FC | FD | FE | FF | | | | | | | | | | |
| 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 0A | 0B | 0C | 0D | 0E | 0F |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 1A | 1B | 1C | 1D | 1E | 1F |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 2A | 2B | 2C | 2D | 2E | 2F |
| 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 3A | 3B | 3C | 3D | 3E | 3F |
| 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 4A | 4B | 4C | 4D | 4E | 4F |
| 50 | 51 | 52 | 53 | 54 | | | | | | | | | | | |



02.02.78

HW 25. THERMOCO MAPPER BOX UNIT TEST MODEL.. FLT. S/N 3 PAGE 8
1981-12-20 07:51:02 PRIMARY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN LOW BUS
.....

.....
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
10 11 12 13 14 15 16 17 18 19 1A 1B 1C 1D 1E 1F
20 21 22 23 24 25 26 27 28 29 2A 2B 2C 2D 2E 2F
30 31 32 33 34 35 36 37 38 39 3A 3B 3C 3D 3E 3F
40 41 42 43 44 45 46 47 48 49 4A 4B 4C 4D 4E 4F
50 51 52 53 54 55 56 57 58 59 5A 5B 5C 5D 5E 5F
60 61 62 63 64 65 66 67 68 69 6A 6B 6C 6D 6E 6F
70 71 72 73 74 75 76 77 78 79 7A 7B 7C 7D 7E 7F
80 81 82 83 84 85 86 87 88 89 8A 8B 8C 8D 8E 8F
90 91 92 93 94 95 96 97 98 99 9A 9B 9C 9D 9E 9F
AA AB AC AD AE AF
BA BB BC BD BE BF
CA CB CC CD CE CF
DA DB DC DD DE DF
EA EB EC ED EE EF
FA FB FC FD FE FF
00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F
10 11 12 13 14 15 16 17 18 19 1A 1B 1C 1D 1E 1F
20 21 22 23 24 25 26 27 28 29 2A 2B 2C 2D 2E 2F
30 31 32 33 34 35 36 37 38 39 3A 3B 3C 3D 3E 3F
40 41 42 43 44 45 46 47 48 49 4A 4B 4C 4D 4E 4F
50 51 52 53 54 55 56 57 58 59 5A 5B 5C 5D 5E 5F
60 61 62 63 64 65 66 67 68 69 6A 6B 6C 6D 6E 6F
70 71 72 73 74 75 76 77 78 79 7A 7B 7C 7D 7E 7F
80 81 82 83 84 85 00 01 02 03 04 05 06 07 08 09
0A 0B 0C 0D 0E 0F 10 11 12 13 14 15 16 17 18 19
1A 1B 1C 1D 1E 1F 20 21 22 23 24 25 26 27 28 29
2A 2B 2C 2D 2E 2F 30 31 32 33 34 35 36 37 38 39
3A 3B 3C 3D 3E 3F 40
TEST PASSED

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EX 02 2

| | | | |
|----------|---|-----------------|-----------------|
| IC 11111 | 1 | $1/0 \approx 0$ | $H/L \approx H$ |
| IC 11114 | 2 | $1/0 \approx 1$ | $H/L \approx H$ |

| | MIN(V) | DVM(V) | MAX(V) |
|----------------------|---------|---------|--------|
| REF-FILE ON STATUS A | -0.8000 | -0.0488 | 0.8000 |
| REF-FILE ON STATUS B | -0.8000 | -0.1347 | 0.8000 |

| | | | | | | | | | | | | | | |
|------|---------|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 3088 | 10.15.1 | ZF-F1 | 7D7D | 7D7D | 7D7D | 7C7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7D |
| | | | 7C7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7C |
| | | | 7D7C | 7D7D | 7D7D | 7C7C | 7D7D | 7C7C | 7C7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7D |
| | | | 7C7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7D |
| 3088 | 10.15.1 | ZF-D2 | 7C7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7D |
| | | | 7C7C | 7C7D | 7D7D | 7C7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7C |
| | | | 7C7C | 7C7D | 7D7D | 7C7C | 7D7D | 7C7C | 7D7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7D |
| | | | 7C7C | 7C7D | 7D7D | 7C7C | 7C7D | 7D7D | 7C7C | 7D7D | 7D7D | 7C7C | 7D7D | 7D7D |

TEST CASES FOR FOREIGN DATA

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HS 236 THERMATIC MASTER MIX UNIT TEST MODEL... FLT. SZN 3 PAGE 11
 1201/12/02 07:11:33 PENALTY ACCEPTANCE @ ADJUTANT GEN. VOLTAGE MARGIN LOW BUS
 11-12-02 0-24 100-100 11-11



02.02.01

RE11111 1 1/0 = 1 H/L H
 RE11111 2 1/0 = 0 H/L H

| | MIN(V) | DUM(V) | MAX(V) |
|---------------------|---------|---------|--------|
| RE11111 ON STATUS A | -0.8000 | -0.0479 | 0.8000 |
| RE11111 ON STATUS B | -0.8000 | -0.1346 | 0.8000 |

| | | | | | |
|-----------------|----------------|----------------|----------------|----------------|----------------|
| 3000L 100% ZF11 | ZD7D ZD7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D |
| | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D |
| | ZD7C ZD7D ZD7D | ZC7C ZD7D ZC7C | ZD7C ZD7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D |
| | ZC7C ZC7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D |
| 3000 100% ZF02 | ZD7D ZD7D ZD7D | ZD7C ZD7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D |
| | ZC7C ZC7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D |
| | ZD7C ZD7D ZD7D | ZC7C ZC7D ZC7D | ZC7C ZD7D ZC7D | ZC7C ZD7D ZC7D | ZC7C ZD7D ZD7D |
| | ZC7C ZC7D ZD7D | ZC7C ZC7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D | ZC7C ZD7D ZD7D |

TEST PASSED FOR FORMAT DATA

ORIGINAL PAGE IS
 OF POOR QUALITY

TRS 206 THERMAL MATTER MIX UNIT TEST MODEL .. 111. S/N 3 PAGE 13
 1981/12/02 02:11:59 FINALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN LOW BUS



REV 02 81

RE-1111 1 1/0 = 0 H/I = H
 RE-1111 2 1/0 = 0 H/I = H

| | MIN(V) | DOM(V) | MAX(V) |
|---------------------|---------|---------|--------|
| RE-1111 ON STATUS A | -0.8000 | -0.0594 | 0.3060 |
| RE-1111 ON STATUS B | -0.8000 | -0.1348 | 0.8000 |

| | | | | | |
|-----------------|----------------|----------------|----------------|----------------|----------------|
| 3000: 1105 1111 | ZDZD ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD |
| | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD |
| | ZDZC ZDZD ZDZD | ZCZC ZDZD ZCZD | ZDZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD |
| | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD |
| 3000: 1105 1102 | ZDZD ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD |
| | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD |
| | ZDZC ZDZD ZDZD | ZCZC ZDZD ZCZD | ZDZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD |
| | ZCZC ZCZD ZDZD | ZCZC ZCZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD | ZCZC ZDZD ZDZD |

TEST PASSED FOR FORMAT DATA

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A circular stamp with the text 'HAC 1151 527' inside. The text is arranged in three lines: 'HAC' on the top line, '1151' on the middle line, and '527' on the bottom line. The stamp is oriented upside down.

HS-236 THERMAL METER MIX UNIT TEST MODEL 1. FIT. S/N 3 PAGE 1/
 1981/12/02 04:22:13 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN LOW BUS
 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1



DEC 02 '81

| MAJOR
FRAME
NUMBER | MINOR FRAME NUMBER | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 451 | | | F | F | F | F | F | F | F | F | F | F | F | F | F | F |
| 452 | F | F | F | F | F | F | F | F | F | F | F | F | F | F | F | F |
| 453 | F | F | F | F | F | F | F | F | F | F | F | F | F | F | F | F |
| 454 | F | F | F | F | F | F | F | F | F | F | F | F | F | F | F | F |
| 455 | F | F | F | F | F | F | F | F | F | F | F | F | F | F | F | X |
| 3080 1000 0140 | 1080 F010 F010 F0F0 F0F0 F010 F010 F0F0 F0F0 F0F0 F0F0 F0F0 F0F0 F0F0
F010 F010 F0F0 F0F0 F0F0 F0F0 F0F0 F010 1010 F0F0 F0F0 F0F0 F0F0
F010 F0F0 F0F0 F0F0 F0F0 F0F0 F0F0 F0F0 10F0 F0F0 F0F0 F0F0 F0F0
1010 F0F0 F0F0 F0F0 F0F0 F0F0 F0F0 F010 10F0 F0F0 F0F0 F0F0 F0F0 | | | | | | | | | | | | | | | |

ORIGINAL PAGE 19
 OF POOR QUALITY

456 F F
 TEST FAILED, DATA SHOULD BE ALL F0

Test failed due to noise in Tester. See 2 retest
 passed on Pgs 18 and 19 Py 12-2-81



DEC 02 '81

HAC
TFST
S27

DEC 02 '84

[illegible]

LIST PASSED. DATA ARE ALL FO

ORIGINAL PAGE IS
OF POOR QUALITY

Retest passed Reg 12-2-81

114C
TOST
527

DE 028

DEC 02 '87

| | | | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0140 | 9109 | 4206 | 5818 | D907 | 8902 | 9259 | E200 | 8240 | D44E | 515A | 4801 | 4308 | C7AC | 6108 |
| | | | 8811 | 4019 | F765 | C022 | 9E4B | 9719 | 26D6 | FAC9 | F348 | 9105 | 0D8A | A531 |
| | | | 1107 | 2946 | 147E | 3378 | F017 | E34C | 5976 | 688D | 2101 | 1841 | C120 | 0E52 |
| | | | A550 | 6501 | 9195 | 908C | F838 | AD52 | 1192 | 3273 | 732F | 4508 | 30EE | 8236 |

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115 73 THROATLE MASTER BOX UNIT TEST MODEL 1, FLT. 520 PAGE 21
 1981/12/02 02:00:04 FINALITY ACCEPTANCE @ ADRIENT TEST, VOLTAGE MARGIN HIGH BUS
 1.1.1.1.1-12-14-15-16



02 02 02

| TABLE
FRAME
NUMBER | MINOR FRAME NUMBER | | | | | | | | | | | | | | | |
|--------------------------|--------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 2 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 3 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 4 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 5 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 6 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 7 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 8 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 9 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 10 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |

TEST PASSED, DATA ARE ALL 100% 100%

ORIGINAL PAGE IS
 OF POOR QUALITY

HNS 215 THERMATIC MASTER MIX UNIT TEST MODUL., FLT. S/N PAGE 22
 1991 12/02 02:00:21 FINALITY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS



R. 02 '81

| | | | | | |
|------|-----------|----------------|----------------|----------------|----------------|
| 3088 | 1115 0111 | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | 0000 0000 0000 |
| | | FFFF FFFF FFFF | FFFF FFFF FFFF | FFFF FFFF FFFF | 0000 0000 0000 |
| | | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | FFFF FFFF FFFF |
| | | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | 0000 0000 0000 |
| 3088 | 1115 0202 | FFFF FFFF FFFF | FFFF FFFF FFFF | FFFF FFFF FFFF | 0000 0000 0000 |
| | | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | FFFF FFFF FFFF |
| | | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | 0000 0000 0000 |
| | | FFFF FFFF FFFF | FFFF FFFF FFFF | FFFF FFFF FFFF | 0000 0000 0000 |
| 3088 | 1115 0203 | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | FFFF FFFF FFFF |
| | | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | 0000 0000 0000 |
| | | FFFF FFFF FFFF | FFFF FFFF FFFF | FFFF FFFF FFFF | 0000 0000 0000 |
| | | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | FFFF FFFF FFFF |
| 3088 | 1115 0114 | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | 0000 0000 0000 |
| | | FFFF FFFF FFFF | FFFF FFFF FFFF | FFFF FFFF FFFF | 0000 0000 0000 |
| | | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | FFFF FFFF FFFF |
| | | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | 0000 0000 0000 |
| 3088 | 1115 0105 | FFFF FFFF FFFF | FFFF FFFF FFFF | FFFF FFFF FFFF | 0000 0000 0000 |
| | | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | FFFF FFFF FFFF |
| | | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | 0000 0000 0000 |
| | | FFFF FFFF FFFF | FFFF FFFF FFFF | FFFF FFFF FFFF | 0000 0000 0000 |
| 3088 | 1115 0225 | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | FFFF FFFF FFFF |
| | | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | 0000 0000 0000 |
| | | FFFF FFFF FFFF | FFFF FFFF FFFF | FFFF FFFF FFFF | 0000 0000 0000 |
| | | 0000 0000 0000 | 0000 0000 0000 | FFFF FFFF FFFF | FFFF FFFF FFFF |

TEST 11.5810

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HS-200 THERMATIC GADGET MUX UNIT TEST MODEL.. FLT. S/N PAGE 23
 1981/12/02 07:00:37 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 14:11.27.1-4 SIGNIFICANT TEST PROPERTY



Q. 02 71

MAJOR FRAME 1 TO 192

| SUB
FRAME | MAJOR FRAME NUMBER | | | | | | | | | | | | | | | |
|--------------|--------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 2 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 3 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 4 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 5 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 6 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 7 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 8 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 9 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 10 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 11 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 12 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |

PART 1 TEST PASSED, DATA ARE F1 D2 C3 B4 A5 96 87 78 69 5A 4B 3C 2D 1E 0F

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02 00

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PAGE 2 (S) POSSIBLE DATA REF: 1 D2 C3 E4 A5 96 87 78 69 50 41 32 23 14 05



REV 02/81

HC-226 THERMAL MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 25
1981/12/02 07:55:12 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
11.7V. 5% 1--3 11.7V. 5% 1--3 11.7V. 5% 1--3 11.7V. 5% 1--3

MAJOR FRAME 300 TO 400

| SUPER
MAJOR
FRAME | MAJOR FRAME NUMBER | | | | | | | | | | | | | | | |
|-------------------------|--------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 1 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 2 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 3 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 4 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 5 | P | P | P | P | P | P | P | | | | | | | | | |

PORT 3 TEST PASSED, DATA ARE E1 D2 C3 E4 A5 96 87 78 69 5A 4B 3C 2D 1E 0F

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[illegible]

| CROSS TABLE | | | | | | | | | | | | | | | |
|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 |
| 00 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 |
| 01 | 01 | 00 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 00 |
| 02 | 02 | 03 | 00 | 01 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 01 |
| 03 | 03 | 04 | 01 | 02 | 00 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 02 |
| 04 | 04 | 05 | 06 | 07 | 08 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 03 |
| 05 | 05 | 06 | 07 | 08 | 09 | 01 | 00 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 04 |
| 06 | 06 | 07 | 08 | 09 | 10 | 02 | 03 | 00 | 01 | 04 | 05 | 06 | 07 | 08 | 05 |
| 07 | 07 | 08 | 09 | 10 | 11 | 03 | 04 | 01 | 02 | 00 | 06 | 07 | 08 | 09 | 06 |
| 08 | 08 | 09 | 10 | 11 | 12 | 04 | 05 | 02 | 03 | 04 | 00 | 01 | 02 | 03 | 07 |
| 09 | 09 | 10 | 11 | 12 | 13 | 05 | 06 | 03 | 04 | 05 | 07 | 00 | 01 | 02 | 08 |
| 10 | 10 | 11 | 12 | 13 | 14 | 06 | 07 | 04 | 05 | 06 | 08 | 01 | 02 | 03 | 09 |
| 11 | 11 | 12 | 13 | 14 | 00 | 07 | 08 | 05 | 06 | 07 | 09 | 02 | 03 | 04 | 10 |
| 12 | 12 | 13 | 14 | 00 | 01 | 08 | 09 | 06 | 07 | 08 | 10 | 03 | 04 | 05 | 11 |
| 13 | 13 | 14 | 00 | 01 | 02 | 09 | 10 | 07 | 08 | 09 | 11 | 04 | 05 | 06 | 12 |
| 14 | 14 | 00 | 01 | 02 | 03 | 10 | 11 | 08 | 09 | 10 | 12 | 05 | 06 | 07 | 13 |
| 15 | 00 | 01 | 02 | 03 | 04 | 11 | 12 | 09 | 10 | 11 | 13 | 06 | 07 | 08 | 14 |
| 16 | 01 | 02 | 03 | 04 | 05 | 12 | 13 | 10 | 11 | 12 | 14 | 07 | 08 | 09 | 15 |
| 17 | 02 | 03 | 04 | 05 | 06 | 13 | 14 | 11 | 12 | 13 | 15 | 08 | 09 | 10 | 16 |
| 18 | 03 | 04 | 05 | 06 | 07 | 14 | 15 | 12 | 13 | 14 | 16 | 09 | 10 | 11 | 17 |
| 19 | 04 | 05 | 06 | 07 | 08 | 15 | 16 | 13 | 14 | 15 | 17 | 10 | 11 | 12 | 18 |
| 20 | 05 | 06 | 07 | 08 | 09 | 16 | 17 | 14 | 15 | 16 | 18 | 11 | 12 | 13 | 19 |
| 21 | 06 | 07 | 08 | 09 | 10 | 17 | 18 | 15 | 16 | 17 | 19 | 12 | 13 | 14 | 20 |
| 22 | 07 | 08 | 09 | 10 | 11 | 18 | 19 | 16 | 17 | 18 | 20 | 13 | 14 | 15 | 21 |
| 23 | 08 | 09 | 10 | 11 | 12 | 19 | 20 | 17 | 18 | 19 | 21 | 14 | 15 | 16 | 22 |
| 24 | 09 | 10 | 11 | 12 | 13 | 20 | 21 | 18 | 19 | 20 | 22 | 15 | 16 | 17 | 23 |
| 25 | 10 | 11 | 12 | 13 | 14 | 21 | 22 | 19 | 20 | 21 | 23 | 16 | 17 | 18 | 24 |
| 26 | 11 | 12 | 13 | 14 | 15 | 22 | 23 | 20 | 21 | 22 | 24 | 17 | 18 | 19 | 25 |
| 27 | 12 | 13 | 14 | 15 | 16 | 23 | 24 | 21 | 22 | 23 | 25 | 18 | 19 | 20 | 26 |
| 28 | 13 | 14 | 15 | 16 | 17 | 24 | 25 | 22 | 23 | 24 | 26 | 19 | 20 | 21 | 27 |
| 29 | 14 | 15 | 16 | 17 | 18 | 25 | 26 | 23 | 24 | 25 | 27 | 20 | 21 | 22 | 28 |
| 30 | 15 | 16 | 17 | 18 | 19 | 26 | 27 | 24 | 25 | 26 | 28 | 21 | 22 | 23 | 29 |
| 31 | 16 | 17 | 18 | 19 | 20 | 27 | 28 | 25 | 26 | 27 | 29 | 22 | 23 | 24 | 30 |
| 32 | 17 | 18 | 19 | 20 | 21 | 28 | 29 | 26 | 27 | 28 | 30 | 23 | 24 | 25 | 31 |
| 33 | 18 | 19 | 20 | 21 | 22 | 29 | 30 | 27 | 28 | 29 | 3 | | | | |

45-236 AUTOMATIC MASTER BOX UNIT TEST MODEL 1.1 F1.1 5/2N PAGE 29
 1981/12/02 02:56:51 FINALITY ACCEPTANCE @ CURRENT TIME. VOLTAGE MARGIN HIGH BUS



010200

1111 1 170 1 171 = H
 1111 2 170 1 171 = H

MIN(V) DVM(V) MAX(V)

-1111 ON STATUS A 3.5000 5.0921 5.5000
 -1111 ON STATUS B 3.5000 5.0961 5.5000

1000 1020 ZF11 ZDZC ZDZD ZDZD ZCZC ZCZD ZDZC FFFF FFFF FFFF FFFF FFFF FFFF
 1111 1111 FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF
 1111 1111 FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF FFFF
 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000 0000

1000 1020 ZF02 0000 0000 0000 0000 0000 00ZC ZCZC ZCZD ZCZC ZCZC ZCZD ZDZD
 ZCZC ZDZD ZDZC ZCZC ZDZD ZDZC ZCZC ZDZD ZDZD ZCZC ZDZC ZDZC
 ZDZC ZDZD ZDZD ZCZC ZDZD ZCZC ZCZC ZDZD ZDZD ZCZC ZDZD ZDZD
 ZCZC ZDZD ZDZD ZCZC ZDZD ZDZD ZCZC ZDZD ZDZD ZCZC ZDZD ZDZD

-51 PASSED FOR LOGICAL DATA

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1931-12-02 12:00:00
 1931-12-02 12:00:00
 1931-12-02 12:00:00



0000

| NAME | MINOR FRAG- GUMER | | | | | | | | | | | | | | | |
|------|-------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| FRAG | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 451 | | | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 461 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 463 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 464 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 465 | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P | P |
| 466 | P | | | | | | | | | | | | | | | |

1931-12-02 12:00:00

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OF POOR QUALITY

Appendix A

Multiplexer Performance Data

A/D THRESHOLD TEST DATA

Ambient, Voltage Margin High Bus

Section 10

HS-236 THEMATIC MAPPER MIX UNIT TEST MODEL: F11, S/N PAGE 12
 1981/12/02 08:07:03 FINAL ACCEPTANCE @ AERIAL TECH. UNIT 11/11/81
 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81
 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81

12/3/81
 HAC
 TIT
 17
 DEC 02 '81

BACK TO RMS ERROR, 2) THRESHOLD INCREMENT 1/- 0.0 THRESHOLD (31.2)
 IF REMAINING DATA ARE FOR INFORMATION ONLY

THESE ARE THE STANDARD DEVIATION LINE TESTS Y = 11.140000 - 0.000000

DEVIATION OF SLOPE FROM IDEAL IS: 1.153%
 OFFSET IS: -46.1mV
 COEFFICIENT OF DETERMINATION IS: R^2 = .99998050
 ANALOG INPUT DURING DC RESTORE IS: 63.9mV

DATA: 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81

THESE ARE THE STANDARD DEVIATION LINE TESTS Y = 11.140000 - 0.000000

| MAXIMUM | THRESHOLD | AVERAGE | MINIMUM | THRESHOLD | STANDARD DEVIATION |
|---------|-----------|----------|---------|-----------|--------------------|
| 22.9mV | 211 | 15.869mV | 0.0mV | 32 | 1.271mV |

11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81

| MAXIMUM | THRESHOLD | AVERAGE | MINIMUM | THRESHOLD | STANDARD DEVIATION |
|---------|-----------|----------|---------|-----------|--------------------|
| 1.3mV | 228 | -0.091mV | -5.6mV | 144 | 1.051mV |

11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81 11/11/81

| MAXIMUM | THRESHOLD | AVERAGE | MINIMUM | THRESHOLD | STANDARD DEVIATION |
|---------|-----------|----------|---------|-----------|--------------------|
| 1.3mV | 232 | -0.003mV | -1.3mV | 216 | 0.621mV |

TEST PASSED

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HS-236 THEMATIC MAPPER MUX UNIT TEST MOD#1.. FLT. S/N PAGE 38
 1981/12/02 08:02:17 FINALITY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.15.3.5-14 AND THRESHOLD TEST (HAND) - 1 14-PM 10 DEC 81



| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE DEC 02 81 | |
|--|------------------------|---------------------------|-------|-------|------------------------------------|----------------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | | |
|----|-----------|---------|-------|------|------|------|-------|-------|
| 1 | 1111 1111 | -24.375 | -36.2 | -0.9 | -0.0 | | -30.7 | -5.5 |
| 2 | 1111 1110 | -8.750 | -25.0 | -1.0 | -1.0 | 11.2 | -14.9 | -10.1 |
| 3 | 1111 1101 | 6.875 | -0.6 | 0.9 | 0.0 | 24.4 | 0.9 | -1.5 |
| 4 | 1111 1100 | 22.500 | 12.3 | 1.1 | 1.1 | 13.0 | 16.7 | -1.3 |
| 5 | 1111 1011 | 38.125 | 28.8 | -0.1 | 0.7 | 16.5 | 32.5 | -3.6 |
| 6 | 1111 1010 | 53.750 | 43.3 | -1.0 | -1.0 | 14.5 | 48.3 | -5.0 |
| 7 | 1111 1001 | 69.375 | 66.6 | -0.9 | -0.9 | 23.3 | 64.1 | 2.5 |
| 8 | 1111 1000 | 85.000 | 70.7 | 1.1 | 0.0 | 4.1 | 79.9 | -9.2 |
| 9 | 1111 0111 | 100.625 | 90.4 | 0.8 | 1.0 | 19.7 | 95.7 | -5.3 |
| 10 | 1111 0110 | 116.250 | 104.9 | -1.1 | -0.1 | 14.5 | 111.5 | -6.6 |
| 11 | 1111 0101 | 131.875 | 128.1 | -1.0 | -1.0 | 23.1 | 127.3 | 0.2 |
| 12 | 1111 0100 | 147.500 | 144.1 | -0.1 | -1.0 | 16.0 | 143.1 | 0.9 |
| 13 | 1111 0011 | 163.125 | 156.1 | 0.8 | 0.9 | 12.1 | 158.9 | -2.8 |
| 14 | 1111 0010 | 178.750 | 172.4 | 1.0 | 1.0 | 16.2 | 174.7 | -2.4 |
| 15 | 1111 0001 | 194.375 | 194.3 | -1.2 | -0.0 | 21.9 | 190.5 | 3.8 |
| 16 | 1111 0000 | 210.000 | 202.0 | -1.1 | -1.0 | 7.7 | 206.3 | -4.4 |
| 17 | 1110 1111 | 225.625 | 218.4 | 1.0 | 0.1 | 16.4 | 222.2 | -3.8 |
| 18 | 1110 1110 | 241.250 | 229.7 | 1.0 | 0.9 | 11.3 | 238.0 | -8.3 |
| 19 | 1110 1101 | 256.875 | 254.9 | -0.1 | 0.9 | 25.2 | 253.8 | 1.2 |
| 20 | 1110 1100 | 272.500 | 270.9 | -1.1 | -1.0 | 15.9 | 269.6 | 1.3 |
| 21 | 1110 1011 | 288.125 | 285.2 | -0.9 | -0.8 | 14.3 | 285.4 | -0.2 |
| 22 | 1110 1010 | 303.750 | 298.3 | 0.9 | -0.1 | 13.0 | 301.2 | -2.9 |
| 23 | 1110 1001 | 319.375 | 321.2 | 0.8 | 1.0 | 22.9 | 317.0 | 4.2 |
| 24 | 1110 1000 | 335.000 | 330.3 | -1.1 | -0.0 | 9.1 | 332.8 | -2.5 |
| 25 | 1110 0111 | 350.625 | 346.8 | -0.9 | -0.9 | 16.5 | 348.6 | -1.8 |

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HS-236 TH-MATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 39
 1981/12/02 08:02:17 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 # * * * * * A/D THRESHOLD TEST CHANNELS 1 - 12 IN CHANNELS 1 - 12

HAS
TEST
S27

| THRESHOLD
NUMBER | A/D
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|------------------|------------------------|---------------------------|-----------------|----------------------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS
LOWER | RATIO= 1 ?1
UPPER | | POINT | DEVIATION |
| 26 | 1110 0110 | 366.250 | 360.4 | -0.1 | -1.0 | 13.6 | 364.4 | -4.0 |
| 27 | 1110 0101 | 381.875 | 382.5 | 0.8 | 1.0 | 22.1 | 380.2 | -2.2 |
| 28 | 1110 0100 | 397.500 | 401.8 | 0.9 | 1.0 | 19.3 | 396.0 | -5.8 |
| 29 | 1110 0011 | 413.125 | 412.5 | -1.1 | -0.0 | 10.7 | 411.8 | 0.7 |
| 30 | 1110 0010 | 428.750 | 428.8 | -1.2 | -1.0 | 16.3 | 427.6 | 1.2 |
| 31 | 1110 0001 | 444.375 | 447.8 | 1.0 | -0.0 | 19.0 | 443.4 | -4.4 |
| 32 | 1110 0000 | 460.000 | 447.8 | 1.1 | 1.1 | 0.0 | 459.2 | -11.4 |
| 33 | 1101 1111 | 475.625 | 473.3 | -0.1 | 1.0 | 25.5 | 475.0 | -1.7 |
| 34 | 1101 1110 | 491.250 | 484.6 | -1.0 | -1.0 | 11.3 | 490.8 | -6.2 |
| 35 | 1101 1101 | 506.875 | 510.7 | -1.0 | -0.9 | 26.1 | 506.6 | -4.0 |
| 36 | 1101 1100 | 522.500 | 522.5 | 0.9 | 0.9 | 11.8 | 522.5 | 0.1 |
| 37 | 1101 1011 | 538.125 | 539.2 | 0.8 | 1.0 | 16.7 | 538.3 | 0.9 |
| 38 | 1101 1010 | 553.750 | 552.7 | -1.1 | -0.0 | 13.5 | 554.1 | -1.3 |
| 39 | 1101 1001 | 569.375 | 576.8 | -1.0 | -1.0 | 24.1 | 569.9 | 7.0 |
| 40 | 1101 1000 | 585.000 | 583.4 | 0.0 | -1.0 | 6.5 | 587.7 | -2.3 |
| 41 | 1101 0111 | 600.625 | 600.5 | 1.1 | 1.0 | 17.1 | 601.5 | -1.0 |
| 42 | 1101 0110 | 616.250 | 613.0 | 1.0 | 0.9 | 12.5 | 617.2 | -4.3 |
| 43 | 1101 0101 | 631.875 | 637.9 | -1.1 | -1.0 | 24.9 | 633.1 | -4.9 |
| 44 | 1101 0100 | 647.500 | 653.8 | -1.1 | -1.0 | 15.9 | 648.9 | -4.9 |
| 45 | 1101 0011 | 663.125 | 666.0 | 0.8 | 0.0 | 12.2 | 664.7 | 1.3 |
| 46 | 1101 0010 | 678.750 | 681.1 | 1.0 | 1.1 | 15.0 | 680.5 | 0.6 |
| 47 | 1101 0001 | 694.375 | 702.7 | -0.0 | 0.9 | 21.6 | 696.3 | -6.4 |
| 48 | 1101 0000 | 710.000 | 714.7 | -1.1 | -1.0 | 12.0 | 712.1 | -2.6 |
| 49 | 1100 1111 | 725.625 | 728.7 | -0.9 | -1.0 | 14.0 | 727.9 | 0.8 |
| 50 | 1100 1110 | 741.250 | 738.1 | 0.9 | 0.8 | 9.3 | 743.7 | -1.6 |
| 51 | 1100 1101 | 756.875 | 763.7 | 0.9 | 0.9 | 25.6 | 759.5 | -4.2 |

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HS-236 THERMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 41
 1981/12/02 08:02:17 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.5-14 AND THRESHOLD TEST (CRAP) - 1.5 SECONDS

MAC
 1151
 S27

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|------------------------|---------------------------|----------------------------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LEVELS RATIO= 1:1
LOWER | UPPER | | POINT | DEVIATION |
| 79 1011 0001 | 1194.38 | 1210.8 | 0.9 | 0.9 | 21.7 | 1202.1 | 8.7 |
| 80 1011 0000 | 1210.00 | 1221.9 | -0.9 | 0.0 | 11.1 | 1212.9 | 4.0 |
| 81 1010 1111 | 1225.63 | 1237.0 | -1.0 | -1.1 | 15.1 | 1233.7 | 3.4 |
| 82 1010 1110 | 1241.25 | 1246.6 | 0.1 | -0.9 | 9.5 | 1249.5 | -2.9 |
| 83 1010 1101 | 1256.88 | 1271.7 | 1.1 | 1.0 | 25.1 | 1265.3 | 6.4 |
| 84 1010 1100 | 1272.50 | 1286.3 | 1.0 | 1.0 | 14.6 | 1281.1 | 5.2 |
| 85 1010 1011 | 1288.13 | 1302.2 | -0.8 | -0.9 | 15.9 | 1296.9 | 5.3 |
| 86 1010 1010 | 1303.75 | 1314.3 | -1.0 | -1.0 | 12.0 | 1312.7 | 1.6 |
| 87 1010 1001 | 1319.38 | 1337.1 | 1.0 | 0.1 | 22.8 | 1328.5 | 8.6 |
| 88 1010 1000 | 1335.00 | 1344.1 | 1.0 | 1.0 | 7.0 | 1344.3 | -0.2 |
| 89 1010 0111 | 1350.63 | 1362.0 | 0.0 | 1.0 | 17.8 | 1360.1 | 1.8 |
| 90 1010 0110 | 1366.25 | 1374.7 | -1.1 | -1.1 | 12.7 | 1375.9 | -1.3 |
| 91 1010 0101 | 1381.88 | 1399.0 | -1.0 | -1.0 | 24.3 | 1391.7 | 7.2 |
| 92 1010 0100 | 1397.50 | 1415.6 | 1.1 | 1.0 | 16.6 | 1407.5 | 8.1 |
| 93 1010 0011 | 1413.13 | 1427.0 | 0.9 | 0.9 | 11.4 | 1423.3 | 3.6 |
| 94 1010 0010 | 1428.75 | 1442.1 | -1.0 | -0.0 | 15.1 | 1439.2 | 2.9 |
| 95 1010 0001 | 1444.38 | 1463.8 | -1.0 | -1.0 | 21.7 | 1455.0 | 8.8 |
| 96 1010 0000 | 1460.00 | 1467.8 | -0.1 | -1.2 | 4.0 | 1470.3 | -3.0 |
| 97 1001 1111 | 1475.63 | 1487.6 | 1.1 | 1.0 | 19.8 | 1486.6 | 1.0 |
| 98 1001 1110 | 1491.25 | 1496.4 | 1.0 | 1.1 | 8.8 | 1502.4 | -6.0 |
| 99 1001 1101 | 1506.88 | 1524.0 | -1.0 | -1.0 | 27.6 | 1518.2 | 5.9 |
| 100 1001 1100 | 1522.50 | 1535.9 | -1.0 | -1.0 | 11.9 | 1534.0 | 1.9 |
| 101 1001 1011 | 1538.13 | 1553.1 | 0.9 | -0.0 | 17.1 | 1549.8 | 3.3 |
| 102 1001 1010 | 1553.75 | 1563.4 | 1.0 | 1.0 | 10.3 | 1561.6 | -2.2 |
| 103 1001 1001 | 1569.38 | 1588.8 | 0.0 | 0.9 | 25.4 | 1581.4 | 7.4 |
| 104 1001 1000 | 1585.00 | 1594.9 | -1.2 | -1.2 | 6.1 | 1597.2 | -2.3 |

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-236 THOMATIC MAPPER MUX UNIT TEST MODEL 11 FLT. S/N PAGE 42

81/12/02 08:02:17 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS

11.3.5-41 AND THRESHOLD TEST (RANDOM) 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20



| THRESHOLD AND OUTPUT NUMBER | THRESHOLD | IDEAL VALUE (MV) | ANALOG INPUT VOLTAGE (MV) LEVELS RATIO= 1:1 | | | INCREASE FROM PREV THRESHOLD | 11.3.5-41 STRAIGHT LINE | |
|-----------------------------|-----------|------------------|---|-------|-------|------------------------------|-------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | LINE | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1614.5 | -0.9 | -0.9 | 19.6 | 1613.0 | 1.5 |
| 106 | 1001 0110 | 1616.25 | 1624.3 | 1.2 | 1.1 | 9.8 | 1623.8 | -4.5 |
| 107 | 1001 0101 | 1631.88 | 1639.6 | 0.9 | 1.0 | 25.3 | 1644.6 | 5.0 |
| 108 | 1001 0100 | 1647.50 | 1644.9 | -1.1 | -0.1 | 15.1 | 1660.4 | 4.5 |
| 109 | 1001 0011 | 1663.13 | 1679.8 | -1.1 | -0.9 | 14.8 | 1676.2 | 3.5 |
| 110 | 1001 0010 | 1678.75 | 1692.9 | 0.1 | -1.0 | 13.1 | 1692.0 | 0.3 |
| 111 | 1001 0001 | 1694.38 | 1714.5 | 1.9 | 1.0 | 21.6 | 1702.8 | 6.2 |
| 112 | 1001 0000 | 1710.00 | 1728.4 | 1.0 | 1.1 | 13.8 | 1721.6 | 4.2 |
| 113 | 1000 1111 | 1725.63 | 1740.4 | -0.9 | -0.9 | 12.0 | 1739.5 | 0.9 |
| 114 | 1000 1110 | 1741.25 | 1749.5 | -1.2 | -1.0 | 9.1 | 1755.3 | -5.8 |
| 115 | 1000 1101 | 1756.88 | 1774.9 | 0.9 | -0.1 | 25.3 | 1771.1 | 3.8 |
| 116 | 1000 1100 | 1772.50 | 1788.9 | 1.2 | 1.0 | 14.1 | 1786.9 | 2.1 |
| 117 | 1000 1011 | 1788.13 | 1805.0 | 0.0 | 0.9 | 16.0 | 1802.2 | 2.3 |
| 118 | 1000 1010 | 1803.75 | 1817.1 | -1.0 | -1.1 | 12.1 | 1818.5 | -1.4 |
| 119 | 1000 1001 | 1819.38 | 1842.0 | -0.9 | -1.0 | 24.9 | 1834.3 | 2.2 |
| 120 | 1000 1000 | 1835.00 | 1851.3 | 1.1 | 1.1 | 9.3 | 1850.1 | 1.2 |
| 121 | 1000 0111 | 1850.63 | 1865.3 | 1.0 | 1.1 | 14.0 | 1875.9 | -0.6 |
| 122 | 1000 0110 | 1866.25 | 1877.3 | -1.0 | 0.0 | 11.9 | 1881.2 | -4.4 |
| 123 | 1000 0101 | 1881.88 | 1902.2 | -1.0 | -1.1 | 24.9 | 1892.5 | 4.2 |
| 124 | 1000 0100 | 1897.50 | 1920.3 | 0.0 | -1.0 | 18.1 | 1913.3 | 2.0 |
| 125 | 1000 0011 | 1913.13 | 1930.5 | 1.0 | 1.0 | 10.1 | 1929.1 | 1.4 |
| 126 | 1000 0010 | 1928.75 | 1943.6 | 1.1 | 1.1 | 13.1 | 1944.2 | -1.3 |
| 127 | 1000 0001 | 1944.38 | 1967.3 | -0.9 | -0.9 | 23.2 | 1960.2 | 6.6 |
| 128 | 1000 0000 | 1960.00 | 1981.6 | -1.3 | -1.2 | 14.3 | 1974.5 | 5.1 |
| 129 | 0111 1111 | 1975.63 | 1987.9 | 1.0 | 0.0 | 6.3 | 1992.3 | -4.4 |
| 130 | 0111 1110 | 1991.25 | 1998.1 | 1.9 | 1.0 | 10.1 | 2000.1 | -10.1 |

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5-236 THEMATIC MAPPER MIX UNIT TEST MODEL .. FLT. S/N PAGE 43

08/12/02 08:02:17 FINALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS

.....-H- AND THRESHOLD TEST



000201

| # SHOLD
NUMBER | A/D
THRESHOLD | OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|-------------------|------------------|---------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 131 | 0111 | 1101 | 2006.88 | 2023.7 | 0.1 | 0.9 | 21.6 | 2023.9 | -0.3 |
| 132 | 0111 | 1100 | 2022.50 | 2039.3 | -1.0 | -1.1 | 15.6 | 2039.8 | -0.5 |
| 133 | 0111 | 1011 | 2038.13 | 2054.5 | -1.0 | -1.0 | 15.2 | 2054.6 | -1.0 |
| 134 | 0111 | 1010 | 2054.75 | 2066.1 | 1.1 | 1.2 | 11.6 | 2071.4 | -5.2 |
| 135 | 0111 | 1001 | 2069.38 | 2088.8 | 1.0 | 1.0 | 22.6 | 2087.2 | 1.6 |
| 136 | 0111 | 1000 | 2085.00 | 2096.0 | -1.1 | -0.0 | 7.2 | 2101.0 | -6.2 |
| 137 | 0111 | 0111 | 2100.63 | 2115.2 | -1.1 | -1.0 | 19.1 | 2118.8 | -3.6 |
| 138 | 0111 | 0110 | 2116.25 | 2127.2 | 0.1 | -1.1 | 12.0 | 2134.6 | -7.4 |
| 139 | 0111 | 0101 | 2131.88 | 2149.3 | 1.0 | 1.1 | 22.1 | 2150.4 | -1.1 |
| 140 | 0111 | 0100 | 2147.50 | 2167.3 | 1.0 | 1.1 | 18.0 | 2166.2 | 1.1 |
| 141 | 0111 | 0011 | 2163.13 | 2180.4 | -1.0 | -0.9 | 13.2 | 2182.0 | -1.5 |
| 142 | 0111 | 0010 | 2178.75 | 2194.9 | -1.2 | -1.1 | 14.4 | 2197.8 | -2.9 |
| 143 | 0111 | 0001 | 2194.38 | 2214.7 | 1.0 | -0.1 | 19.8 | 2213.6 | 1.1 |
| 144 | 0111 | 0000 | 2210.00 | 2223.8 | -5.0 | 1.1 | 9.1 | 2229.4 | -5.6 |
| 145 | 0110 | 1111 | 2225.63 | 2240.2 | 0.0 | 1.0 | 16.3 | 2246.2 | -5.0 |
| 146 | 0110 | 1110 | 2241.25 | 2251.6 | -1.2 | -1.2 | 11.4 | 2261.0 | -9.4 |
| 147 | 0110 | 1101 | 2256.88 | 2277.6 | -1.1 | -1.1 | 26.0 | 2276.8 | 0.2 |
| 148 | 0110 | 1100 | 2272.50 | 2292.5 | 1.1 | 1.1 | 15.0 | 2292.6 | -0.1 |
| 149 | 0110 | 1011 | 2288.13 | 2305.8 | 1.0 | 1.1 | 13.2 | 2308.4 | -2.2 |
| 150 | 0110 | 1010 | 2303.75 | 2320.2 | -1.2 | -0.1 | 14.5 | 2329.2 | -4.0 |
| 151 | 0110 | 1001 | 2319.38 | 2341.8 | -1.0 | -1.0 | 21.5 | 2340.1 | 1.2 |
| 152 | 0110 | 1000 | 2335.00 | 2349.6 | 0.1 | -1.2 | 7.8 | 2351.9 | -5.3 |
| 153 | 0110 | 0111 | 2350.63 | 2366.3 | 1.0 | 1.0 | 16.2 | 2371.2 | -5.4 |
| 154 | 0110 | 0110 | 2366.25 | 2378.3 | 1.0 | 1.1 | 12.1 | 2387.5 | -9.1 |
| 155 | 0110 | 0101 | 2381.88 | 2402.5 | -1.1 | -0.9 | 24.1 | 2403.3 | -0.8 |
| 156 | 0110 | 0100 | 2397.50 | 2423.5 | -1.2 | -1.2 | 21.0 | 2419.1 | 4.4 |
| 157 | 0110 | 0011 | 2413.13 | 2431.5 | 1.1 | 0.0 | 8.1 | 2434.2 | -3.3 |

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TEST
521

DEC 02 '81

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| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE
(MV)
LEVELS RATIO=
NOMINAL | INPUT VOLTAGE
(MV)
LOWER | 1:1
UPPER | INCREASE
FROM 100 V
THRESHOLD | BEST-FIT STRAIGHT LINE
POINT | DEVIATION |
|---------------------|-------------------------|------------------------|--|--------------------------------|--------------|-------------------------------------|---------------------------------|-----------|
| 158 | 0110 0010 | 2428.75 | 2445.8 | 0.9 | 1.0 | 14.3 | 2440.7 | -4.8 |
| 159 | 0110 0001 | 2444.38 | 2466.5 | 0.0 | 1.1 | 20.6 | 2466.5 | -0.0 |
| 160 | 0110 0000 | 2460.00 | 2470.9 | -1.2 | -1.3 | 4.5 | 2462.3 | -11.4 |
| 161 | 0101 1111 | 2475.63 | 2493.0 | -1.1 | -1.1 | 22.0 | 2498.1 | -3.1 |
| 162 | 0101 1110 | 2491.25 | 2501.4 | 1.1 | 1.1 | 8.4 | 2503.9 | -12.5 |
| 163 | 0101 1101 | 2506.88 | 2528.0 | 1.1 | 1.1 | 26.6 | 2529.7 | -1.7 |
| 164 | 0101 1100 | 2522.50 | 2543.8 | -1.2 | -0.0 | 15.8 | 2545.5 | -1.7 |
| 165 | 0101 1011 | 2538.13 | 2558.9 | -1.1 | -1.0 | 15.1 | 2561.3 | -2.4 |
| 166 | 0101 1010 | 2553.75 | 2570.3 | 0.0 | -1.2 | 11.3 | 2577.1 | -6.2 |
| 167 | 0101 1001 | 2569.38 | 2592.6 | 1.1 | 1.1 | 22.3 | 2592.9 | -0.4 |
| 168 | 0101 1000 | 2585.00 | 2601.3 | -0.7 | 1.1 | 8.7 | 2603.7 | -7.4 |
| 169 | 0101 0111 | 2600.63 | 2619.3 | -1.1 | -1.0 | 18.0 | 2624.5 | -5.3 |
| 170 | 0101 0110 | 2616.25 | 2630.6 | -1.1 | -1.1 | 11.3 | 2640.3 | -9.3 |
| 171 | 0101 0101 | 2631.88 | 2654.2 | 0.7 | 0.1 | 23.6 | 2656.2 | -2.0 |
| 172 | 0101 0100 | 2647.50 | 2670.9 | 1.0 | 1.0 | 16.7 | 2672.0 | -1.1 |
| 173 | 0101 0011 | 2663.13 | 2683.8 | 0.0 | 1.0 | 12.8 | 2687.8 | -4.0 |
| 174 | 0101 0010 | 2678.75 | 2700.1 | -1.0 | -1.1 | 16.3 | 2701.6 | -3.5 |
| 175 | 0101 0001 | 2694.38 | 2719.5 | -1.1 | -1.1 | 19.4 | 2719.4 | 0.1 |
| 176 | 0101 0000 | 2710.00 | 2731.1 | 1.1 | 1.1 | 11.6 | 2735.2 | -4.1 |
| 177 | 0100 1111 | 2725.63 | 2744.1 | 1.1 | 1.1 | 13.0 | 2751.0 | -8.9 |
| 178 | 0100 1110 | 2741.25 | 2754.7 | -1.0 | 0.1 | 10.6 | 2756.8 | -12.1 |
| 179 | 0100 1101 | 2756.88 | 2781.2 | -1.1 | -1.2 | 26.5 | 2782.6 | -1.4 |
| 180 | 0100 1100 | 2772.50 | 2797.8 | -4.7 | -1.1 | 16.6 | 2798.4 | -0.6 |
| 181 | 0100 1011 | 2788.13 | 2810.1 | 1.1 | 1.1 | 12.2 | 2815.2 | -4.1 |
| 182 | 0100 1010 | 2803.75 | 2822.3 | 1.1 | 1.1 | 12.2 | 2830.0 | -7.7 |
| 183 | 0100 1001 | 2819.38 | 2845.9 | -1.2 | -1.0 | 23.6 | 2845.8 | 0.1 |

IS-236 TH-MATIC MATTER MUX UNIT TEST MODEL .. FLT. S/N PAGE 91

981/12/02 00:02:17 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HOLD EEP

1250-13-5-11 AND THRESHOLD TEST CHANNEL - 1 - 500 MHz 50-1-1



| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 184 | 0100 1000 | 2837.00 | 2857.7 | -1.3 | -1.2 | 11.7 | 2851.6 | -3.9 |
| 185 | 0100 0111 | 2850.63 | 2870.4 | 1.1 | 0.1 | 19.7 | 2877.4 | -7.0 |
| 186 | 0100 0110 | 2866.25 | 2881.8 | 1.2 | 1.1 | 11.3 | 2891.2 | -11.4 |
| 187 | 0100 0101 | 2881.88 | 2907.0 | -0.0 | 1.1 | 25.2 | 2909.8 | -7.1 |
| 188 | 0100 0100 | 2897.50 | 2928.0 | -1.2 | -1.1 | 21.0 | 2924.8 | 1.2 |
| 189 | 0100 0011 | 2913.13 | 2937.1 | -1.1 | -1.0 | 9.1 | 2940.6 | -3.5 |
| 190 | 0100 0010 | 2928.75 | 2949.3 | 1.0 | 1.2 | 12.2 | 2956.5 | -7.1 |
| 191 | 0100 0001 | 2944.38 | 2970.8 | 0.9 | 1.1 | 21.4 | 2972.3 | -1.5 |
| 192 | 0100 0000 | 2960.00 | 2988.7 | -1.3 | -0.0 | 17.9 | 2988.1 | 0.7 |
| 193 | 0011 1111 | 2975.63 | 3000.5 | -1.1 | -1.0 | 11.8 | 3003.9 | -3.4 |
| 194 | 0011 1110 | 2991.25 | 3009.9 | 0.0 | -1.1 | 9.4 | 3019.7 | -9.8 |
| 195 | 0011 1101 | 3006.88 | 3035.8 | 1.0 | 1.1 | 25.9 | 3035.5 | 0.3 |
| 196 | 0011 1100 | 3022.50 | 3048.7 | 1.2 | 1.2 | 12.9 | 3051.3 | -2.6 |
| 197 | 0011 1011 | 3038.13 | 3066.9 | -1.1 | -1.0 | 18.1 | 3067.1 | -0.2 |
| 198 | 0011 1010 | 3053.75 | 3077.8 | -1.2 | -1.1 | 10.9 | 3082.9 | -5.1 |
| 199 | 0011 1001 | 3069.38 | 3100.6 | 1.1 | 0.0 | 22.8 | 3098.7 | 1.9 |
| 200 | 0011 1000 | 3085.00 | 3105.9 | 1.2 | 1.2 | 5.3 | 3114.5 | -8.6 |
| 201 | 0011 0111 | 3100.63 | 3126.5 | 0.0 | 1.1 | 20.6 | 3130.4 | -1.8 |
| 202 | 0011 0110 | 3116.25 | 3138.8 | -1.3 | -1.2 | 12.3 | 3146.1 | -7.1 |
| 203 | 0011 0101 | 3131.88 | 3162.9 | -1.1 | -0.6 | 24.1 | 3161.9 | 1.0 |
| 204 | 0011 0100 | 3147.50 | 3178.7 | 1.0 | 1.1 | 15.3 | 3177.7 | 1.0 |
| 205 | 0011 0011 | 3163.13 | 3192.5 | 1.0 | 1.1 | 13.8 | 3191.5 | -1.0 |
| 206 | 0011 0010 | 3178.75 | 3208.6 | -1.1 | 0.0 | 16.0 | 3209.3 | -0.8 |
| 207 | 0011 0001 | 3194.38 | 3228.5 | -1.1 | -1.1 | 20.0 | 3225.1 | 3.4 |
| 208 | 0011 0000 | 3210.00 | 3240.2 | -0.1 | -1.1 | 11.6 | 3240.2 | -0.8 |
| 209 | 0010 1111 | 3225.63 | 3253.4 | 1.1 | 1.1 | 13.2 | 3256.8 | -3.4 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODH... FLT. S/N PAGE 47
 1981/12/02 08:02:17 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.1.1.1.1.1.1 AND THRESHOLD TEST (BAND) - 1.0 1.0 1.0 1.0 1.0 1.0



| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|---------------|-------------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO= | LOWER UPPER | | POINT | DEVIATION |
| 237 | 0001 0011 | 3663.13 | 3702.8 | 1.2 | 1.3 | 13.4 | 3699.3 | 3.5 |
| 238 | 0001 0010 | 3678.75 | 3716.8 | 1.1 | 1.1 | 14.0 | 3715.1 | 1.7 |
| 239 | 0001 0001 | 3694.38 | 3738.6 | -1.2 | -1.1 | 21.8 | 3730.9 | 7.7 |
| 240 | 0001 0000 | 3710.00 | 3754.5 | -1.4 | -1.3 | 15.9 | 3746.7 | 7.8 |
| 241 | 0000 1111 | 3725.63 | 3763.8 | 1.1 | 0.1 | 9.3 | 3762.5 | 1.3 |
| 242 | 0000 1110 | 3741.25 | 3773.0 | 1.0 | 1.0 | 9.2 | 3778.3 | -5.4 |
| 243 | 0000 1101 | 3756.88 | 3800.8 | -0.1 | 1.1 | 27.8 | 3794.1 | 6.6 |
| 244 | 0000 1100 | 3772.50 | 3817.6 | -1.3 | -1.2 | 16.9 | 3809.9 | 7.7 |
| 245 | 0000 1011 | 3788.13 | 3832.4 | -1.2 | -1.1 | 14.8 | 3825.7 | 6.7 |
| 246 | 0000 1010 | 3803.75 | 3842.3 | 1.0 | 1.2 | 9.8 | 3841.5 | 0.7 |
| 247 | 0000 1001 | 3819.38 | 3866.7 | 0.8 | 0.9 | 24.4 | 3867.3 | 9.3 |
| 248 | 0000 1000 | 3835.00 | 3879.5 | -1.3 | 0.1 | 12.9 | 3873.2 | 6.4 |
| 249 | 0000 0111 | 3850.63 | 3893.7 | -1.2 | -1.2 | 14.2 | 3889.0 | 4.7 |
| 250 | 0000 0110 | 3866.25 | 3904.3 | 0.1 | -0.9 | 10.6 | 3904.8 | -0.5 |
| 251 | 0000 0101 | 3881.88 | 3929.5 | 0.9 | 1.0 | 25.2 | 3920.6 | 8.9 |
| 252 | 0000 0100 | 3897.50 | 3949.2 | 1.1 | 1.2 | 19.7 | 3936.4 | 12.8 |
| 253 | 0000 0011 | 3913.13 | 3960.8 | -1.1 | -1.1 | 11.6 | 3952.2 | 8.6 |
| 254 | 0000 0010 | 3928.75 | 3975.3 | -1.2 | -1.2 | 14.5 | 3968.0 | 7.3 |
| 255 | 0000 0001 | 3944.38 | 3994.4 | 1.1 | 0.1 | 19.1 | 3983.8 | 10.6 |

ORIGINAL PAGE 18
 OF POOR QUALITY

HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 48
 1981/12/02 08:08:42 FINALITY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH PHS
 3.5.3.2-4 AND THRESHOLD TEST CHAND= 2.0 DEFENSE
 SUMMARY

HAC
 TEST
 S27
 0.02

CHECK 1) RMS ERROR, 2) THRESHOLD INCREMENT (+/- 0.0 = THRESH INC = 31.2)
 THE REMAINING DATA ARE FOR INFORMATION ONLY

BEST FIT STRAIGHT LINE TS: $Y = 15.472X - 46.2MV$

DEVIATION OF SLOPE FROM IDEAL TS: 1.612%
 OFFSET IS: -46.2MV
 COEFFICIENT OF DETERMINATION IS: $R^2 = .99998870$
 ANALOG INPUT DURING DC RESTORE IS: 63.9MV

RMS ERROR = 4.123MV REGR: RMS ERROR = 2.4113MV

THRESHOLD INCREMENT MEASUREMENT

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 27.8MV | 206 | 15.930MV | 1.1MV | 185 | 5.053MV |

LOWER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 7.2MV | 46 | -0.195MV | -6.0MV | 220 | 1.093MV |

UPPER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 3.0MV | 80 | -0.002MV | -1.1MV | 160 | .766MV |

TEST PASSED

ORIGINAL PAGE 18
 OF POOR QUALITY

HS-236 THEMATIC MAPPER MIX UNIT TEST MODEL .. FLT. S/N PAGE 49
 1981/12/02 08:08:56 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.1.1.4 AND THRESHOLD TEST (HAND)= 2.5.3.5.3.1.1.4



| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | TOTAL | DEVIATION |

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | |
|----|-----------|---------|-------|------|------|-------|------|
| 1 | 1111 1111 | -24.375 | -36.7 | -1.4 | 0.0 | -30.4 | -6.3 |
| 2 | 1111 1110 | -8.750 | -19.2 | -1.0 | -0.9 | -14.5 | -4.8 |
| 3 | 1111 1101 | 6.875 | -0.1 | 0.8 | 0.0 | 1.4 | -1.5 |
| 4 | 1111 1100 | 22.500 | 13.7 | 0.8 | 0.9 | 17.3 | -4.5 |
| 5 | 1111 1011 | 38.125 | 29.4 | -0.0 | 0.8 | 33.1 | -4.7 |
| 6 | 1111 1010 | 53.750 | 50.2 | -1.0 | -0.9 | 49.0 | 1.2 |
| 7 | 1111 1001 | 69.375 | 67.2 | -0.9 | -0.9 | 64.9 | 2.3 |
| 8 | 1111 1000 | 85.000 | 77.9 | 0.9 | 0.0 | 80.8 | -2.8 |
| 9 | 1111 0111 | 100.625 | 90.8 | 0.7 | 0.8 | 95.6 | -1.9 |
| 10 | 1111 0110 | 116.250 | 111.3 | -1.1 | -0.0 | 112.5 | -1.3 |
| 11 | 1111 0101 | 131.875 | 128.5 | -0.8 | -0.8 | 128.4 | 0.1 |
| 12 | 1111 0100 | 147.500 | 146.7 | -0.1 | -0.9 | 144.3 | 2.5 |
| 13 | 1111 0011 | 163.125 | 157.5 | 0.8 | 0.8 | 160.2 | -2.7 |
| 14 | 1111 0010 | 178.750 | 179.4 | 0.8 | 0.9 | 175.0 | 3.4 |
| 15 | 1111 0001 | 194.375 | 195.2 | -0.8 | 0.0 | 191.9 | 3.3 |
| 16 | 1111 0000 | 210.000 | 207.4 | -0.9 | -0.8 | 207.8 | -0.4 |
| 17 | 1110 1111 | 225.625 | 218.3 | 0.8 | -0.0 | 224.7 | -0.4 |
| 18 | 1110 1110 | 241.250 | 235.6 | 0.8 | 0.9 | 239.5 | -3.9 |
| 19 | 1110 1101 | 256.875 | 255.3 | -0.1 | 0.8 | 255.4 | -0.1 |
| 20 | 1110 1100 | 272.500 | 272.6 | -0.9 | -0.8 | 271.3 | 1.3 |
| 21 | 1110 1011 | 288.125 | 285.8 | -0.9 | -0.8 | 287.2 | -1.4 |
| 22 | 1110 1010 | 303.750 | 305.3 | 0.8 | -0.0 | 303.0 | 2.2 |
| 23 | 1110 1001 | 319.375 | 321.9 | 0.7 | 0.7 | 318.9 | 0.0 |
| 24 | 1110 1000 | 335.000 | 338.2 | -1.0 | -0.0 | 334.8 | 0.4 |
| 25 | 1110 0111 | 350.625 | 347.0 | -0.8 | -0.8 | 348.7 | -0.6 |

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HS-236 THEMATIC MAPPER MIX UNIT TEST MODEL.. FLT. S/N PAGE 50
 1981/12/02 08:08:56 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HILL HRS
 3.5.3.5-43 AND THRESHOLD TEST CHANNEL 29 FEB 1981



02'81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDFAI
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|----------------------------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO= 1:1
LOWER | UPPER | | POINT | DEVIATION |
| 26 | 1110 0110 | 366.250 | 366.8 | -0.1 | -1.0 | 19.7 | 366.6 | 0.2 |
| 27 | 1110 0101 | 381.875 | 383.1 | 0.7 | 0.8 | 16.3 | 382.4 | 0.7 |
| 28 | 1110 0100 | 397.500 | 404.2 | 0.8 | 0.9 | 21.1 | 398.3 | 0.9 |
| 29 | 1110 0011 | 413.125 | 413.6 | -0.8 | -0.0 | 9.4 | 414.2 | -0.6 |
| 30 | 1110 0010 | 428.750 | 435.7 | -0.9 | -0.9 | 22.1 | 430.1 | 0.6 |
| 31 | 1110 0001 | 444.375 | 449.5 | 0.8 | -0.0 | 13.8 | 446.9 | 3.6 |
| 32 | 1110 0000 | 460.000 | 457.7 | 0.9 | 0.9 | 8.1 | 461.8 | -1.1 |
| 33 | 1101 1111 | 475.625 | 474.2 | -0.1 | 0.8 | 16.5 | 477.7 | -3.5 |
| 34 | 1101 1110 | 491.250 | 491.8 | -0.9 | -0.9 | 17.5 | 493.6 | -1.8 |
| 35 | 1101 1101 | 506.875 | 512.0 | -0.9 | -0.8 | 20.2 | 509.4 | 2.5 |
| 36 | 1101 1100 | 522.500 | 524.7 | 0.7 | -0.0 | 12.7 | 525.3 | -0.7 |
| 37 | 1101 1011 | 538.125 | 540.8 | 0.7 | 0.7 | 16.1 | 541.2 | -0.4 |
| 38 | 1101 1010 | 553.750 | 560.5 | -0.9 | 0.0 | 19.7 | 557.1 | 3.4 |
| 39 | 1101 1001 | 569.375 | 578.4 | -0.8 | -0.8 | 17.9 | 573.0 | 3.4 |
| 40 | 1101 1000 | 585.000 | 592.5 | -0.1 | -1.0 | 14.1 | 588.8 | 3.6 |
| 41 | 1101 0111 | 600.625 | 601.8 | 0.8 | 0.8 | 9.4 | 604.7 | -2.9 |
| 42 | 1101 0110 | 616.250 | 620.7 | 0.9 | 0.9 | 18.8 | 620.6 | 0.1 |
| 43 | 1101 0101 | 631.875 | 639.4 | -0.9 | -0.0 | 18.7 | 636.5 | 3.0 |
| 44 | 1101 0100 | 647.500 | 656.9 | -1.0 | -0.9 | 17.5 | 652.3 | 4.6 |
| 45 | 1101 0011 | 663.125 | 668.2 | 0.8 | -0.0 | 11.2 | 668.2 | -0.0 |
| 46 | 1101 0010 | 678.750 | 689.4 | 2.2 | 0.9 | 21.3 | 684.1 | 5.3 |
| 47 | 1101 0001 | 694.375 | 704.8 | -0.0 | 0.8 | 15.3 | 700.0 | 4.8 |
| 48 | 1101 0000 | 710.000 | 721.4 | -0.9 | -0.9 | 16.6 | 715.8 | 5.5 |
| 49 | 1100 1111 | 725.625 | 729.3 | -0.8 | -0.8 | 7.9 | 731.7 | -2.5 |
| 50 | 1100 1110 | 741.250 | 745.3 | 0.9 | 0.0 | 16.0 | 747.6 | -2.3 |
| 51 | 1100 1101 | 756.875 | 765.1 | 0.8 | 0.8 | 19.7 | 763.5 | 1.6 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL .. FLT. S/N PAGE 51
 1981/12/02 08:08:56 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3-17-3-5-4 A/D THRESHOLD TEST CHANNEL= 1% SENSITIVITY=1



| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | DIGITAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|--------------------------|---------------------------|----------------------------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO= 1:1
LOWER | UPPER | | POINT | DEVIATION |
| 52 | 1100 1100 | 772.500 | 782.0 | -0.9 | 0.0 | 17.0 | 779.4 | 2.7 |
| 53 | 1100 1011 | 788.125 | 795.6 | -0.8 | -0.8 | 13.6 | 791.2 | 0.4 |
| 54 | 1100 1010 | 803.750 | 814.9 | 0.0 | -0.9 | 19.3 | 811.1 | 3.3 |
| 55 | 1100 1001 | 819.375 | 831.4 | 0.8 | 0.8 | 16.5 | 827.0 | 4.4 |
| 56 | 1100 1000 | 835.000 | 849.3 | 0.9 | 0.9 | 17.9 | 842.9 | 6.4 |
| 57 | 1100 0111 | 850.625 | 856.4 | -0.8 | -0.0 | 7.2 | 858.7 | -2.3 |
| 58 | 1100 0110 | 866.250 | 875.3 | -0.9 | -0.8 | 18.8 | 874.6 | 0.7 |
| 59 | 1100 0101 | 881.875 | 892.1 | 0.7 | -0.0 | 16.8 | 890.5 | 1.6 |
| 60 | 1100 0100 | 897.500 | 912.7 | 0.9 | 0.8 | 20.6 | 906.4 | 6.3 |
| 61 | 1100 0011 | 913.125 | 921.5 | 0.0 | 0.8 | 8.7 | 922.2 | -0.8 |
| 62 | 1100 0010 | 928.750 | 943.7 | -0.9 | 0.7 | 22.2 | 938.1 | 5.6 |
| 63 | 1100 0001 | 944.375 | 958.7 | -0.8 | -0.8 | 15.0 | 954.0 | 4.7 |
| 64 | 1100 0000 | 960.000 | 966.3 | 0.9 | 0.0 | 7.6 | 969.9 | -3.5 |
| 65 | 1011 1111 | 975.625 | 983.9 | 0.8 | 0.8 | 17.6 | 985.8 | -1.8 |
| 66 | 1011 1110 | 991.250 | 1001.3 | -1.0 | 0.0 | 17.3 | 1001.6 | -0.4 |
| 67 | 1011 1101 | 1006.88 | 1021.5 | -0.8 | -0.8 | 20.2 | 1017.5 | 4.0 |
| 68 | 1011 1100 | 1022.50 | 1034.0 | 0.0 | -0.8 | 12.5 | 1033.4 | 0.7 |
| 69 | 1011 1011 | 1038.13 | 1049.9 | 0.8 | 0.8 | 15.9 | 1049.3 | 0.7 |
| 70 | 1011 1010 | 1053.75 | 1071.2 | -1.9 | 0.9 | 21.2 | 1065.1 | 6.0 |
| 71 | 1011 1001 | 1069.38 | 1087.2 | -0.8 | -0.0 | 16.0 | 1081.0 | 6.2 |
| 72 | 1011 1000 | 1085.00 | 1098.4 | -0.9 | -0.9 | 11.2 | 1094.9 | 1.5 |
| 73 | 1011 0111 | 1100.63 | 1110.5 | 0.9 | -0.0 | 12.1 | 1112.8 | -2.3 |
| 74 | 1011 0110 | 1116.25 | 1129.2 | 0.9 | 0.9 | 18.7 | 1128.6 | 0.6 |
| 75 | 1011 0101 | 1131.88 | 1147.0 | -0.0 | 0.8 | 17.7 | 1144.5 | 2.4 |
| 76 | 1011 0100 | 1147.50 | 1164.3 | -0.9 | -0.9 | 17.3 | 1150.4 | 3.9 |
| 77 | 1011 0011 | 1163.13 | 1177.1 | -0.8 | -0.8 | 12.8 | 1176.3 | 0.8 |
| 78 | 1011 0010 | 1178.75 | 1198.6 | -0.4 | -0.0 | 21.5 | 1192.1 | 6.5 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MOD 1.1. FLT. S/N PAGE 13
 1981/12/02 08:08:56 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 A/D AND THRESHOLD TEST (RANGE) 20 MINIMUM - 1



12/2/81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1616.6 | -0.9 | -0.9 | 11.5 | 1620.8 | -4.2 |
| 106 | 1001 0110 | 1616.25 | 1633.7 | 0.9 | -0.0 | 17.1 | 1636.7 | -3.0 |
| 107 | 1001 0101 | 1631.88 | 1652.1 | 0.7 | 0.7 | 18.5 | 1652.6 | -0.4 |
| 108 | 1001 0100 | 1647.50 | 1668.8 | -0.9 | -0.1 | 16.7 | 1668.5 | 0.4 |
| 109 | 1001 0011 | 1663.13 | 1682.3 | -0.8 | -0.9 | 13.4 | 1684.3 | -2.1 |
| 110 | 1001 0010 | 1678.75 | 1703.6 | -0.0 | -0.9 | 21.4 | 1700.2 | 3.4 |
| 111 | 1001 0001 | 1694.38 | 1717.7 | 0.9 | 0.8 | 14.1 | 1716.1 | 1.6 |
| 112 | 1001 0000 | 1710.00 | 1735.9 | 0.9 | 0.9 | 18.2 | 1732.0 | 4.0 |
| 113 | 1000 1111 | 1725.63 | 1742.4 | -0.8 | -0.0 | 6.4 | 1747.8 | -5.5 |
| 114 | 1000 1110 | 1741.25 | 1758.2 | -0.9 | -0.8 | 15.8 | 1764.7 | -5.6 |
| 115 | 1000 1101 | 1756.88 | 1777.8 | 0.9 | -0.0 | 19.7 | 1779.6 | -1.8 |
| 116 | 1000 1100 | 1772.50 | 1792.3 | 0.9 | 0.8 | 14.5 | 1795.5 | -3.1 |
| 117 | 1000 1011 | 1788.13 | 1807.3 | -0.1 | 0.8 | 15.0 | 1811.3 | -4.0 |
| 118 | 1000 1010 | 1803.75 | 1826.0 | -0.9 | -1.0 | 18.7 | 1827.2 | -1.2 |
| 119 | 1000 1001 | 1819.38 | 1844.5 | -0.9 | -0.9 | 18.5 | 1843.1 | 1.4 |
| 120 | 1000 1000 | 1835.00 | 1860.9 | 1.0 | 0.0 | 16.4 | 1859.0 | 2.0 |
| 121 | 1000 0111 | 1850.63 | 1867.8 | 0.8 | 0.8 | 6.8 | 1874.9 | -7.1 |
| 122 | 1000 0110 | 1866.25 | 1886.7 | -0.9 | -0.0 | 18.9 | 1890.7 | -4.1 |
| 123 | 1000 0101 | 1881.88 | 1905.0 | -0.8 | -0.8 | 18.3 | 1906.6 | -1.7 |
| 124 | 1000 0100 | 1897.50 | 1923.7 | 0.1 | -0.9 | 18.7 | 1922.5 | 1.2 |
| 125 | 1000 0011 | 1913.13 | 1933.2 | 0.8 | 0.8 | 9.5 | 1938.4 | -5.2 |
| 126 | 1000 0010 | 1928.75 | 1955.1 | 0.9 | 0.8 | 21.9 | 1954.2 | 0.8 |
| 127 | 1000 0001 | 1944.38 | 1970.5 | -0.8 | -0.1 | 15.4 | 1970.1 | 0.3 |
| 128 | 1000 0000 | 1960.00 | 1985.0 | -1.0 | -0.9 | 14.5 | 1986.0 | -1.0 |
| 129 | 0111 1111 | 1975.63 | 1996.9 | 0.8 | -0.1 | 11.9 | 2001.9 | -5.0 |
| 130 | 0111 1110 | 1991.25 | 2014.4 | 0.8 | 0.9 | 17.5 | 2017.7 | -1.7 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 14
 1981/12/02 08:08:56 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.15.13.17-4 AND THRESHOLD TEST (FRAND) = 1.4 DEFENSE



DEC 02 '81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|---------------|--------------------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO= | 1:1
LOWER UPPER | | POINT | DEVIATION |
| 131 | 0111 1101 | 2006.88 | 2033.9 | -0.1 | 0.8 | 19.5 | 2003.6 | 0.2 |
| 132 | 0111 1100 | 2022.50 | 2049.4 | -0.9 | -1.0 | 15.6 | 2049.5 | -0.1 |
| 133 | 0111 1011 | 2038.13 | 2063.6 | -0.9 | -0.9 | 14.1 | 2063.4 | -1.8 |
| 134 | 0111 1010 | 2053.75 | 2086.5 | 0.9 | -0.0 | 22.9 | 2081.3 | 5.3 |
| 135 | 0111 1001 | 2069.38 | 2099.2 | 0.8 | 0.8 | 12.7 | 2097.1 | 2.1 |
| 136 | 0111 1000 | 2085.00 | 2112.7 | -0.9 | -0.1 | 13.5 | 2113.0 | -0.3 |
| 137 | 0111 0111 | 2100.63 | 2124.3 | -0.8 | -0.8 | 11.5 | 2128.9 | -4.6 |
| 138 | 0111 0110 | 2116.25 | 2144.0 | 0.1 | -0.9 | 19.7 | 2144.8 | -0.8 |
| 139 | 0111 0101 | 2131.88 | 2159.7 | 0.9 | 0.9 | 15.7 | 2160.6 | -1.0 |
| 140 | 0111 0100 | 2147.50 | 2181.4 | -2.4 | 0.8 | 21.7 | 2176.5 | 4.9 |
| 141 | 0111 0011 | 2163.13 | 2189.9 | -0.8 | 0.0 | 8.5 | 2192.4 | -2.5 |
| 142 | 0111 0010 | 2178.75 | 2216.1 | -1.0 | -0.9 | 26.2 | 2208.3 | 7.8 |
| 143 | 0111 0001 | 2194.38 | 2225.5 | 0.8 | -0.1 | 9.4 | 2224.1 | 1.3 |
| 144 | 0111 0000 | 2210.00 | 2239.8 | -4.2 | 0.9 | 14.4 | 2240.0 | -0.2 |
| 145 | 0110 1111 | 2225.63 | 2249.4 | -0.0 | 0.8 | 9.6 | 2235.9 | -6.5 |
| 146 | 0110 1110 | 2241.25 | 2267.8 | -0.9 | -0.9 | 18.4 | 2271.8 | 1.9 |
| 147 | 0110 1101 | 2256.88 | 2287.0 | -0.9 | -0.9 | 19.2 | 2287.7 | -0.6 |
| 148 | 0110 1100 | 2272.50 | 2302.6 | 0.9 | 0.0 | 15.6 | 2303.5 | -0.9 |
| 149 | 0110 1011 | 2288.13 | 2315.2 | 0.9 | 0.8 | 12.5 | 2319.4 | -4.3 |
| 150 | 0110 1010 | 2303.75 | 2340.3 | -1.0 | -0.1 | 25.1 | 2335.3 | 5.0 |
| 151 | 0110 1001 | 2319.38 | 2352.4 | -0.9 | -0.9 | 12.1 | 2351.2 | 1.2 |
| 152 | 0110 1000 | 2335.00 | 2370.2 | 0.0 | -1.0 | 17.8 | 2362.0 | 3.2 |
| 153 | 0110 0111 | 2350.63 | 2375.8 | 0.8 | 0.9 | 5.6 | 2377.9 | -7.1 |
| 154 | 0110 0110 | 2366.25 | 2395.5 | 0.9 | 0.9 | 19.7 | 2398.8 | -3.3 |
| 155 | 0110 0101 | 2381.88 | 2412.9 | -0.9 | -0.0 | 17.4 | 2414.7 | -1.8 |
| 156 | 0110 0100 | 2397.50 | 2438.1 | -0.9 | -0.9 | 25.3 | 2430.5 | 7.6 |
| 157 | 0110 0011 | 2413.13 | 2441.4 | 0.8 | -0.1 | 3.2 | 2446.4 | -3.1 |

ORIGINAL PAGE IS
OF POOR QUALITY

HS-206 THERMALIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 50
 1981/12/02 08:08:56 FINALITY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 34.1.1.1.1.1 AND THRESHOLD TEST (CRAND)= 1.2 1.2.1.1.1.1



010201

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PRE V
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|------------------------|---------------------------|-------|-------|-------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 158 0110 0010 | 2428.75 | 2465.6 | -1.3 | 0.8 | 24.3 | 2462.3 | 3.3 |
| 159 0110 0001 | 2444.38 | 2477.7 | 0.0 | 0.9 | 12.0 | 2478.2 | -0.3 |
| 160 0110 0000 | 2460.00 | 2489.0 | -1.1 | -1.1 | 11.3 | 2494.1 | -5.0 |
| 161 0101 1111 | 2475.63 | 2503.3 | -0.8 | -0.9 | 14.3 | 2509.9 | -6.6 |
| 162 0101 1110 | 2491.25 | 2521.8 | 0.9 | 0.1 | 18.5 | 2525.8 | -4.0 |
| 163 0101 1101 | 2506.88 | 2539.1 | 0.9 | 0.9 | 17.2 | 2541.7 | -2.6 |
| 164 0101 1100 | 2522.50 | 2553.7 | -0.9 | -0.1 | 14.6 | 2557.6 | -3.3 |
| 165 0101 1011 | 2538.13 | 2569.1 | -0.8 | -0.9 | 15.3 | 2573.4 | 4.4 |
| 166 0101 1010 | 2553.75 | 2592.3 | 0.1 | -1.0 | 23.2 | 2589.3 | 3.0 |
| 167 0101 1001 | 2569.38 | 2604.6 | 0.8 | 0.9 | 12.3 | 2605.2 | -0.6 |
| 168 0101 1000 | 2585.00 | 2619.8 | 0.8 | 0.8 | 15.2 | 2621.1 | -1.3 |
| 169 0101 0111 | 2600.63 | 2629.7 | -0.8 | 0.0 | 9.9 | 2636.9 | -2.2 |
| 170 0101 0110 | 2616.25 | 2648.9 | -1.0 | -0.8 | 19.1 | 2652.8 | -3.9 |
| 171 0101 0101 | 2631.88 | 2665.6 | 0.9 | 0.0 | 16.7 | 2668.7 | -3.1 |
| 172 0101 0100 | 2647.50 | 2686.9 | -3.0 | 0.8 | 21.2 | 2684.6 | 2.3 |
| 173 0101 0011 | 2663.13 | 2694.6 | 0.0 | 0.8 | 7.8 | 2700.5 | -5.8 |
| 174 0101 0010 | 2678.75 | 2721.6 | -0.9 | -1.0 | 26.9 | 2716.3 | 5.2 |
| 175 0101 0001 | 2694.38 | 2731.9 | -0.9 | -0.9 | 10.3 | 2732.2 | -0.4 |
| 176 0101 0000 | 2710.00 | 2749.1 | 0.8 | -0.0 | 12.2 | 2748.1 | 1.0 |
| 177 0100 1111 | 2725.63 | 2755.1 | 0.8 | 0.9 | 6.0 | 2764.0 | -8.9 |
| 178 0100 1110 | 2741.25 | 2774.8 | -3.1 | -0.1 | 19.8 | 2779.8 | -5.0 |
| 179 0100 1101 | 2756.88 | 2792.4 | -0.9 | -0.9 | 12.5 | 2795.2 | -3.3 |
| 180 0100 1100 | 2772.50 | 2808.5 | 0.0 | -0.9 | 16.1 | 2811.6 | -1.1 |
| 181 0100 1011 | 2788.13 | 2820.8 | 0.8 | 0.9 | 12.3 | 2827.5 | -6.2 |
| 182 0100 1010 | 2803.75 | 2844.6 | 0.9 | 0.9 | 23.8 | 2843.3 | 1.3 |
| 183 0100 1001 | 2819.38 | 2858.0 | -0.9 | 0.0 | 13.4 | 2859.2 | -1.2 |

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OF POOR QUALITY

-236 THEMATIC MAPPER MUX UNIT TEST MODEL .. FLT. S/N PAGE 16

31/12/02 08:08:56 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH 18%

TEST 1-1-1 AND THRESHOLD TEST CHANNEL - 22 18-12-02-18-18-18



DEC 02 '01

| INDEX | THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|-------|-----------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 184 | 0100 1000 | 2835.00 | 2880.4 | -1.0 | -1.0 | 22.4 | 2875.1 | 5.3 |
| 185 | 0100 0111 | 2850.63 | 2881.6 | 0.9 | -0.1 | 1.1 | 2891.0 | -9.4 |
| 186 | 0100 0110 | 2866.25 | 2900.7 | 0.8 | 0.8 | 19.1 | 2906.9 | -6.1 |
| 187 | 0100 0101 | 2881.88 | 2918.1 | -0.0 | 0.8 | 17.4 | 2922.7 | -4.6 |
| 188 | 0100 0100 | 2897.50 | 2944.4 | -0.9 | -0.9 | 26.2 | 2940.6 | 5.2 |
| 189 | 0100 0011 | 2913.13 | 2948.1 | 0.9 | -0.8 | 3.7 | 2954.5 | -5.4 |
| 190 | 0100 0010 | 2928.75 | 2973.3 | 0.4 | -0.1 | 25.2 | 2970.4 | 2.9 |
| 191 | 0100 0001 | 2944.38 | 2983.7 | 0.7 | 0.8 | 10.4 | 2966.2 | 2.6 |
| 192 | 0100 0000 | 2960.00 | 2996.0 | -1.0 | 0.0 | 12.4 | 3002.1 | -6.1 |
| 193 | 0011 1111 | 2975.63 | 3010.8 | -0.9 | -0.9 | 14.8 | 3018.0 | -7.1 |
| 194 | 0011 1110 | 2991.25 | 3030.2 | -0.1 | -1.0 | 19.4 | 3034.9 | -3.6 |
| 195 | 0011 1101 | 3006.88 | 3047.0 | 0.9 | 0.9 | 16.7 | 3049.7 | -2.8 |
| 196 | 0011 1100 | 3022.50 | 3060.3 | 0.9 | 0.9 | 13.3 | 3061.6 | -1.1 |
| 197 | 0011 1011 | 3038.13 | 3076.9 | -0.8 | 0.0 | 16.6 | 3081.5 | -4.6 |
| 198 | 0011 1010 | 3053.75 | 3100.3 | -1.0 | -0.9 | 23.3 | 3097.9 | 2.9 |
| 199 | 0011 1001 | 3069.38 | 3112.7 | 0.8 | 0.0 | 12.4 | 3113.3 | -0.6 |
| 200 | 0011 1000 | 3085.00 | 3124.8 | 0.9 | 0.9 | 12.1 | 3129.1 | -4.4 |
| 201 | 0011 0111 | 3100.63 | 3137.2 | -0.0 | 0.8 | 12.4 | 3141.0 | -7.8 |
| 202 | 0011 0110 | 3116.25 | 3157.3 | -0.9 | -0.9 | 20.1 | 3156.9 | -4.6 |
| 203 | 0011 0101 | 3131.88 | 3175.2 | -1.0 | -0.8 | 17.8 | 3176.8 | -1.6 |
| 204 | 0011 0100 | 3147.50 | 3194.8 | 0.8 | 0.0 | 19.6 | 3192.6 | 2.2 |
| 205 | 0011 0011 | 3163.13 | 3203.3 | 0.8 | 0.8 | 8.5 | 3208.5 | -1.2 |
| 206 | 0011 0010 | 3178.75 | 3231.1 | -1.0 | 0.1 | 27.8 | 3234.4 | 6.7 |
| 207 | 0011 0001 | 3194.38 | 3240.8 | -0.9 | -0.9 | 9.7 | 3240.3 | 0.5 |
| 208 | 0011 0000 | 3210.00 | 3258.5 | -0.1 | -0.9 | 17.7 | 3256.1 | 2.4 |
| 209 | 0010 1111 | 3225.63 | 3264.3 | 0.9 | 0.9 | 5.7 | 3272.0 | -7.8 |

ORIGINAL PAGE 18
OF POOR QUALITY

6-236 THMATIC MAPPER MUX UNIT TEST MODEL PAGE 17
 01/12/02 08:08:56 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 * * * * * THRESHOLD TEST * * * * *



| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PRO V
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|-------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 210 | 0010 1110 | 3241.25 | 3284.0 | 0.7 | 0.2 | 19.7 | 3237.9 | -3.9 |
| 211 | 0010 1101 | 3256.08 | 3302.2 | -1.0 | -0.1 | 18.1 | 3303.8 | -1.6 |
| 212 | 0010 1100 | 3272.50 | 3317.6 | -0.9 | -0.9 | 15.4 | 3319.7 | -2.0 |
| 213 | 0010 1011 | 3288.13 | 3330.6 | 0.8 | -0.0 | 13.0 | 3335.5 | -4.9 |
| 214 | 0010 1010 | 3303.75 | 3354.8 | 0.8 | 0.9 | 24.1 | 3351.4 | 3.4 |
| 215 | 0010 1001 | 3319.38 | 3367.3 | -0.0 | 0.8 | 12.5 | 3362.3 | -0.0 |
| 216 | 0010 1000 | 3335.00 | 3386.9 | -1.1 | -1.0 | 19.6 | 3381.2 | 3.7 |
| 217 | 0010 0111 | 3350.63 | 3392.9 | -0.9 | -0.9 | 6.0 | 3399.0 | -6.2 |
| 218 | 0010 0110 | 3366.25 | 3411.2 | 0.8 | -0.0 | 18.1 | 3414.9 | -3.7 |
| 219 | 0010 0101 | 3381.88 | 3429.1 | 0.8 | 0.8 | 17.9 | 3430.8 | -1.7 |
| 220 | 0010 0100 | 3397.50 | 3454.6 | -6.0 | 0.0 | 25.5 | 3446.7 | 7.9 |
| 221 | 0010 0011 | 3413.13 | 3459.1 | -0.8 | -0.8 | 4.5 | 3462.5 | -4.4 |
| 222 | 0010 0010 | 3428.75 | 3486.1 | -0.1 | -1.0 | 27.0 | 3478.4 | 7.7 |
| 223 | 0010 0001 | 3444.38 | 3495.1 | 0.8 | 0.8 | 9.0 | 3494.1 | 0.8 |
| 224 | 0010 0000 | 3460.00 | 3510.1 | 1.0 | 1.1 | 15.0 | 3510.2 | -0.1 |
| 225 | 0001 1111 | 3475.63 | 3521.2 | -0.9 | -0.0 | 11.1 | 3526.1 | -4.9 |
| 226 | 0001 1110 | 3491.25 | 3539.6 | -1.0 | -0.9 | 18.4 | 3541.9 | -2.4 |
| 227 | 0001 1101 | 3506.88 | 3557.2 | 0.9 | 0.1 | 17.6 | 3557.8 | -0.6 |
| 228 | 0001 1100 | 3522.50 | 3570.7 | 0.9 | 0.9 | 13.5 | 3573.7 | -3.0 |
| 229 | 0001 1011 | 3538.13 | 3582.0 | -0.1 | 0.8 | 16.3 | 3589.6 | -2.5 |
| 230 | 0001 1010 | 3553.75 | 3610.5 | -1.1 | -1.0 | 23.5 | 3605.4 | 5.1 |
| 231 | 0001 1001 | 3569.38 | 3624.6 | -0.9 | -0.8 | 14.1 | 3621.3 | 3.3 |
| 232 | 0001 1000 | 3585.00 | 3638.0 | 0.8 | 0.0 | 13.4 | 3632.2 | 0.8 |
| 233 | 0001 0111 | 3600.63 | 3648.7 | 0.8 | 0.9 | 10.6 | 3651.1 | -4.4 |
| 234 | 0001 0110 | 3616.25 | 3668.3 | -1.0 | -0.0 | 19.6 | 3658.9 | -0.7 |
| 235 | 0001 0101 | 3631.88 | 3686.7 | -0.9 | -0.9 | 18.4 | 3684.8 | 1.9 |
| 236 | 0001 0100 | 3647.50 | 3707.5 | -4.8 | -0.9 | 28.7 | 3700.2 | 6.3 |

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 OF POOR QUALITY

3-236 THEMATIC MAPPER MUX UNIT TEST MODH... FLT. S/N PAGE 53
 281/12/02 08:08:56 FINALITY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BBS
 25.13.5-11 A/D THRESHOLD TEST (RANGE) 125 14-12-1982-11



000289

| THRESHOLD
NUMBER | A/D
THRESHOLD | OUTPUT
THRESHOLD | IDEAL | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|------------------|---------------------|---------------|---------------------------|-----------------------------|-------|------------------------------------|------------------------|------|
| | | | VALUE
(MV) | NOMINAL | LEVELS RATIO
LOWER UPPER | POINT | | DEVIATION | |
| 237 | 0001 | 0011 | 3663.13 | 3715.3 | 0.8 | 0.8 | 7.8 | 3716.6 | -1.3 |
| 238 | 0001 | 0010 | 3678.75 | 3741.9 | 0.8 | 0.9 | 26.7 | 3732.5 | 9.5 |
| 239 | 0001 | 0001 | 3694.38 | 3753.0 | -0.9 | -0.0 | 11.1 | 3748.3 | 4.7 |
| 240 | 0001 | 0000 | 3710.00 | 3773.7 | -1.0 | -0.8 | 20.6 | 3764.2 | 9.5 |
| 241 | 0000 | 1111 | 3725.63 | 3776.9 | 0.8 | 0.0 | 3.2 | 3780.1 | -3.2 |
| 242 | 0000 | 1110 | 3741.25 | 3795.7 | 0.8 | 0.9 | 18.8 | 3796.0 | -0.7 |
| 243 | 0000 | 1101 | 3756.88 | 3813.7 | -0.7 | 0.9 | 18.0 | 3811.8 | 1.9 |
| 244 | 0000 | 1100 | 3772.50 | 3829.9 | -1.9 | -0.8 | 16.2 | 3827.7 | 2.2 |
| 245 | 0000 | 1011 | 3788.13 | 3844.6 | -0.9 | -0.8 | 14.6 | 3843.6 | 1.0 |
| 246 | 0000 | 1010 | 3803.75 | 3867.4 | 0.7 | -0.0 | 22.8 | 3859.5 | 7.9 |
| 247 | 0000 | 1001 | 3819.38 | 3880.6 | 0.7 | 0.8 | 13.2 | 3875.3 | 5.3 |
| 248 | 0000 | 1000 | 3835.00 | 3904.9 | -1.2 | 0.1 | 24.2 | 3891.2 | 13.6 |
| 249 | 0000 | 0111 | 3850.63 | 3906.5 | -0.8 | -0.8 | 1.7 | 3907.1 | -0.6 |
| 250 | 0000 | 0110 | 3866.25 | 3925.4 | -0.7 | -1.0 | 18.8 | 3923.0 | 2.4 |
| 251 | 0000 | 0101 | 3881.88 | 3942.8 | 0.8 | 0.9 | 17.4 | 3938.9 | 3.9 |
| 252 | 0000 | 0100 | 3897.50 | 3967.6 | -5.9 | 1.0 | 24.8 | 3954.7 | 12.8 |
| 253 | 0000 | 0011 | 3913.13 | 3973.4 | -0.9 | -0.1 | 5.9 | 3970.6 | 2.8 |
| 254 | 0000 | 0010 | 3928.75 | 4000.1 | -1.0 | -0.8 | 26.6 | 3986.5 | 13.6 |
| 255 | 0000 | 0001 | 3944.38 | 4009.6 | 0.7 | -0.0 | 9.5 | 4002.4 | 7.2 |

ORIGINAL PAGE 13
 OF POOR QUALITY

IS-236 THEMATIC MAPPER MUX UNIT TEST MODEL ., FLT. S/N PAGE 09
 981/12/02 08:15:21 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 *1.3.5-4 A/D THRESHOLD TEST (HAND- 3, SENSITIVE-1
 S U M M A R Y



0.028

FOR 1) RMS ERROR, 2) THRESHOLD INCREMENT(+/- 0.0 = THRESH INC = 31.2)
 REMAINING DATA ARE FOR INFORMATION ONLY

BEST FIT STRAIGHT LINE IS: $Y = 15.834X - 49.1MV$

DEVIATION OF SLOPE FROM IDEAL IS: 1.361%
 OFFSET IS: -49.1MV
 COEFFICIENT OF DETERMINATION IS: $R^2 = .99998640$
 ANALOG INPUT DURING DC RESTORE IS: 63.8MV

RMS ERROR = 4.645MV REQMT: RMS ERROR = 2.445MV

THRESHOLD INCREMENT MEASUREMENT

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 27.6MV | 243 | 15.907MV | 2.6MV | 200 | 5.963MV |

LOWER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 0.8MV | 148 | -0.103MV | -0.0MV | 252 | .726MV |

UPPER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 0.9MV | 196 | -0.013MV | -0.9MV | 184 | .596MV |

TEST PASSED

ORIGINAL PAGE 18
 OF POOR QUALITY

HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 60
 1981/12/02 08:15:34 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN 100.000
 1.11.11.11 AND THRESHOLD TEST CHANNEL 14 50.00000000



| THRESHOLD A/D OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO= 1:1
NOMINAL LOWER UPPER | INCREASE-
FROM PREV
THRESHOLD | PERCENT STRAIGHT LINE
POINT DEVIATION |
|--|------------------------|---|-------------------------------------|--|
|--|------------------------|---|-------------------------------------|--|

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | | |
|----|-----------|---------|-------|------|------|------|-------|------|
| 1 | 1111 1111 | -24.375 | -39.0 | -1.2 | -0.5 | | -33.3 | -5.7 |
| 2 | 1111 1110 | -8.750 | -25.5 | -0.1 | -0.6 | 13.4 | -17.5 | -8.1 |
| 3 | 1111 1101 | 6.875 | -1.3 | 0.5 | 0.7 | 24.2 | -1.6 | 0.3 |
| 4 | 1111 1100 | 22.500 | 11.7 | 0.6 | 0.7 | 13.0 | 14.2 | -2.5 |
| 5 | 1111 1011 | 38.125 | 27.3 | -0.7 | 0.0 | 15.5 | 30.1 | -2.8 |
| 6 | 1111 1010 | 53.750 | 43.5 | -0.7 | -0.6 | 16.2 | 45.9 | -2.4 |
| 7 | 1111 1001 | 69.375 | 64.8 | -0.2 | -0.7 | 21.3 | 61.7 | 3.1 |
| 8 | 1111 1000 | 85.000 | 71.6 | 0.6 | 0.6 | 6.8 | 77.6 | -6.0 |
| 9 | 1111 0111 | 100.625 | 87.8 | 0.6 | 0.6 | 16.2 | 93.4 | -5.6 |
| 10 | 1111 0110 | 116.250 | 104.4 | -0.7 | -0.7 | 16.6 | 109.2 | -4.9 |
| 11 | 1111 0101 | 131.875 | 126.6 | -0.7 | -0.6 | 22.2 | 125.1 | 1.5 |
| 12 | 1111 0100 | 147.500 | 142.4 | 0.6 | -0.0 | 15.7 | 140.9 | 1.3 |
| 13 | 1111 0011 | 163.125 | 153.9 | 0.5 | 0.6 | 11.5 | 156.8 | -2.9 |
| 14 | 1111 0010 | 178.750 | 172.8 | -0.1 | 0.6 | 18.9 | 172.6 | 0.2 |
| 15 | 1111 0001 | 194.375 | 191.4 | -0.6 | -0.6 | 18.7 | 188.4 | 3.0 |
| 16 | 1111 0000 | 210.000 | 202.7 | -0.6 | -0.6 | 11.2 | 204.3 | -1.6 |
| 17 | 1110 1111 | 225.625 | 215.6 | 0.5 | 0.6 | 12.9 | 220.1 | -4.5 |
| 18 | 1110 1110 | 241.250 | 228.7 | 0.5 | 0.5 | 13.1 | 231.9 | -2.2 |
| 19 | 1110 1101 | 256.875 | 254.2 | -0.6 | 0.0 | 21.5 | 251.8 | 2.4 |
| 20 | 1110 1100 | 272.500 | 268.8 | -0.7 | -0.6 | 14.6 | 267.6 | 1.2 |
| 21 | 1110 1011 | 288.125 | 282.1 | 0.0 | -0.6 | 13.3 | 283.5 | -1.3 |
| 22 | 1110 1010 | 303.750 | 297.8 | 0.4 | 0.6 | 15.6 | 299.3 | -1.5 |
| 23 | 1110 1001 | 319.375 | 318.6 | 0.6 | 0.6 | 20.9 | 315.1 | 3.5 |
| 24 | 1110 1000 | 335.000 | 331.9 | -0.7 | -0.7 | 13.3 | 331.0 | 0.9 |
| 25 | 1110 0111 | 350.625 | 343.3 | -0.5 | -0.5 | 11.3 | 346.8 | -3.6 |

ORIGINAL PAGE IS
OF POOR QUALITY

HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 61

1981/12/02 08:15:34 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS

3.5.4.4-11 A/D THRESHOLD TEST CHANNEL - 13 SEP 81 08:15:34



07 02 81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM 100 V
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|----------------------------|-------|-------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO= 1:1
LOWER | UPPER | | POINT | DEVIATION |
| 26 | 1110 0110 | 366.250 | 358.4 | 0.6 | -0.0 | 15.1 | 362.6 | -4.2 |
| 27 | 1110 0101 | 381.875 | 380.3 | 0.4 | 0.2 | 21.9 | 378.5 | 1.8 |
| 28 | 1110 0100 | 397.500 | 401.5 | -0.1 | 0.7 | 21.2 | 394.3 | 7.2 |
| 29 | 1110 0011 | 413.125 | 409.1 | -0.6 | -0.6 | 7.6 | 410.2 | -1.0 |
| 30 | 1110 0010 | 428.750 | 428.0 | -0.7 | -0.7 | 18.9 | 426.0 | 2.0 |
| 31 | 1110 0001 | 444.375 | 446.2 | -0.3 | 0.6 | 18.2 | 441.8 | 4.3 |
| 32 | 1110 0000 | 460.000 | 448.8 | 0.6 | 0.6 | 2.6 | 457.2 | -8.9 |
| 33 | 1101 1111 | 475.625 | 472.4 | -0.6 | 0.0 | 23.6 | 473.0 | -1.1 |
| 34 | 1101 1110 | 491.250 | 484.5 | -0.7 | -0.7 | 12.1 | 489.3 | -4.9 |
| 35 | 1101 1101 | 506.875 | 510.8 | -0.1 | -0.6 | 26.3 | 505.2 | 1.6 |
| 36 | 1101 1100 | 522.500 | 522.4 | 0.5 | 0.5 | 11.6 | 521.0 | 1.4 |
| 37 | 1101 1011 | 538.125 | 537.6 | 0.6 | 0.6 | 15.1 | 536.9 | 0.7 |
| 38 | 1101 1010 | 553.750 | 553.4 | -0.7 | -0.7 | 15.8 | 552.2 | 0.7 |
| 39 | 1101 1001 | 569.375 | 574.8 | -0.6 | -0.5 | 21.4 | 568.5 | 6.3 |
| 40 | 1101 1000 | 585.000 | 583.9 | 0.7 | -0.0 | 9.0 | 584.4 | -0.1 |
| 41 | 1101 0111 | 600.625 | 598.6 | 0.5 | 0.6 | 14.7 | 600.2 | -1.6 |
| 42 | 1101 0110 | 616.250 | 613.2 | -0.0 | 0.7 | 14.6 | 616.1 | -2.9 |
| 43 | 1101 0101 | 631.875 | 637.4 | -0.7 | -0.6 | 24.2 | 631.9 | 5.5 |
| 44 | 1101 0100 | 647.500 | 653.0 | -0.6 | -0.6 | 15.6 | 647.2 | 5.3 |
| 45 | 1101 0011 | 663.125 | 664.1 | 0.6 | 0.6 | 11.0 | 663.6 | 0.5 |
| 46 | 1101 0010 | 678.750 | 682.0 | 0.5 | 0.5 | 18.0 | 679.4 | 2.6 |
| 47 | 1101 0001 | 694.375 | 701.9 | -0.7 | 0.0 | 19.8 | 691.2 | 6.6 |
| 48 | 1101 0000 | 710.000 | 718.0 | -2.4 | -0.7 | 16.1 | 711.1 | 7.0 |
| 49 | 1100 1111 | 725.625 | 726.0 | 0.0 | -0.6 | 7.9 | 726.9 | -0.9 |
| 50 | 1100 1110 | 741.250 | 737.5 | 0.5 | 0.5 | 11.5 | 732.8 | -8.7 |
| 51 | 1100 1101 | 756.875 | 763.6 | 0.5 | 0.6 | 26.1 | 758.6 | 1.0 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FIT. S/N PAGE 62
 1981/12/02 08:15:34 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3454110-4 AND THRESHOLD TEST CHANNEL 3454110-4



| THRESHOLD
NUMBER | A/D
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|------------------|------------------------|---------------------------|----------------------------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO= 1:1
LOWER | UPPER | | POINT | DEVIATION |
| 52 | 1100 1100 | 772.500 | 777.2 | -0.6 | -0.6 | 13.6 | 774.4 | 2.8 |
| 53 | 1100 1011 | 788.125 | 791.7 | -0.7 | -0.6 | 14.5 | 790.3 | 1.4 |
| 54 | 1100 1010 | 803.750 | 805.9 | 0.6 | -0.0 | 14.2 | 806.1 | -0.2 |
| 55 | 1100 1001 | 819.375 | 828.6 | -0.9 | 0.6 | 22.7 | 821.9 | 6.7 |
| 56 | 1100 1000 | 835.000 | 842.6 | -0.0 | 0.8 | 13.9 | 837.8 | 4.8 |
| 57 | 1100 0111 | 850.625 | 852.1 | -0.5 | -0.6 | 9.5 | 853.6 | -1.5 |
| 58 | 1100 0110 | 866.250 | 866.7 | -0.6 | -0.6 | 14.5 | 869.5 | -2.8 |
| 59 | 1100 0101 | 881.875 | 889.6 | 0.6 | 0.6 | 22.9 | 885.3 | 4.3 |
| 60 | 1100 0100 | 897.500 | 907.2 | 0.6 | 0.6 | 17.6 | 901.1 | 6.1 |
| 61 | 1100 0011 | 913.125 | 917.3 | -0.6 | -0.0 | 10.0 | 917.0 | 0.3 |
| 62 | 1100 0010 | 928.750 | 934.9 | -0.6 | -0.6 | 17.6 | 932.8 | 2.1 |
| 63 | 1100 0001 | 944.375 | 954.1 | -0.0 | -0.6 | 19.1 | 948.6 | 5.4 |
| 64 | 1100 0000 | 960.000 | 959.4 | 0.6 | 0.6 | 5.3 | 964.5 | -5.1 |
| 65 | 1011 1111 | 975.625 | 980.6 | 0.6 | 0.7 | 21.2 | 980.3 | 0.3 |
| 66 | 1011 1110 | 991.250 | 993.3 | -0.6 | -0.7 | 12.7 | 996.2 | -2.3 |
| 67 | 1011 1101 | 1006.88 | 1019.6 | -0.7 | -0.6 | 26.2 | 1017.0 | 7.6 |
| 68 | 10 1 1100 | 1022.50 | 1030.1 | 0.7 | -0.0 | 10.5 | 1027.8 | 2.5 |
| 69 | 1011 1011 | 1038.13 | 1045.8 | 0.5 | 0.6 | 15.6 | 1043.7 | 2.1 |
| 70 | 1011 1010 | 1052.75 | 1061.1 | 0.0 | 0.6 | 15.3 | 1059.5 | 1.6 |
| 71 | 1011 1001 | 1069.38 | 1085.2 | -0.7 | -0.7 | 24.1 | 1075.3 | 9.8 |
| 72 | 1011 1000 | 1085.00 | 1088.9 | -0.7 | -0.6 | 3.8 | 1091.2 | -2.2 |
| 73 | 1011 0111 | 1100.63 | 1106.4 | 0.6 | 0.7 | 17.4 | 1107.0 | -0.6 |
| 74 | 1011 0110 | 1116.25 | 1121.0 | 0.6 | 0.6 | 14.6 | 1122.9 | -1.8 |
| 75 | 1011 0101 | 1131.88 | 1145.4 | -0.6 | 0.0 | 24.3 | 1138.7 | 6.7 |
| 76 | 1011 0100 | 1147.50 | 1158.7 | -0.7 | -0.6 | 13.3 | 1154.5 | 4.1 |
| 77 | 1011 0011 | 1163.13 | 1171.8 | -0.0 | -0.6 | 13.1 | 1170.4 | 1.4 |
| 78 | 1011 0010 | 1178.75 | 1189.2 | 0.5 | 0.5 | 17.4 | 1184.2 | 3.0 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL .. FLT. S/N PAGE 43
 1981/12/02 08:15:34 FINALITY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH 100%
 3.5.14.5-4 AND THRESHOLD TEST (RANGE = 14.5-15.5V)



02 01

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|------------------------|--------------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO-
LOWER | 1:1
UPPER | | POINT | DEVIATION |
| 79 | 1011 0001 | 1194.38 | 1210.3 | 0.6 | 0.6 | 21.1 | 1202.0 | 8.3 |
| 80 | 1011 0000 | 1210.00 | 1219.7 | -0.6 | -0.6 | 9.3 | 1217.9 | 1.8 |
| 81 | 1010 1111 | 1225.63 | 1236.1 | -0.6 | -0.5 | 16.4 | 1233.7 | 2.4 |
| 82 | 1010 1110 | 1241.25 | 1244.3 | 0.6 | -0.1 | 8.2 | 1249.6 | -5.7 |
| 83 | 1010 1101 | 1256.88 | 1270.5 | 0.6 | 0.6 | 26.2 | 1265.4 | 5.1 |
| 84 | 1010 1100 | 1272.50 | 1282.4 | -0.1 | 0.5 | 11.8 | 1281.2 | 1.1 |
| 85 | 1010 1011 | 1288.13 | 1298.0 | -0.6 | -0.6 | 15.6 | 1297.1 | 0.9 |
| 86 | 1010 1010 | 1303.75 | 1313.0 | -0.7 | -0.7 | 15.0 | 1312.9 | 0.1 |
| 87 | 1010 1001 | 1319.38 | 1335.7 | 0.6 | 0.6 | 22.7 | 1328.7 | 6.9 |
| 88 | 1010 1000 | 1335.00 | 1345.6 | 0.7 | 0.6 | 9.9 | 1344.6 | 1.0 |
| 89 | 1010 0111 | 1350.63 | 1358.5 | -0.6 | 0.0 | 13.0 | 1360.4 | -1.9 |
| 90 | 1010 0110 | 1366.25 | 1372.9 | -0.7 | -0.6 | 14.3 | 1376.1 | -3.4 |
| 91 | 1010 0101 | 1381.88 | 1396.8 | 0.1 | -0.6 | 23.9 | 1392.1 | 4.7 |
| 92 | 1010 0100 | 1397.50 | 1414.2 | -2.0 | 0.7 | 17.4 | 1407.9 | 6.7 |
| 93 | 1010 0011 | 1413.13 | 1422.5 | 0.6 | 0.6 | 8.3 | 1423.8 | -1.3 |
| 94 | 1010 0010 | 1428.75 | 1440.9 | -0.5 | -0.7 | 18.4 | 1439.6 | 1.3 |
| 95 | 1010 0001 | 1444.38 | 1461.8 | -0.6 | -0.6 | 20.9 | 1455.4 | 6.3 |
| 96 | 1010 0000 | 1460.00 | 1468.0 | 0.7 | 0.1 | 6.2 | 1471.3 | -3.1 |
| 97 | 1001 1111 | 1475.63 | 1488.3 | -2.9 | 0.6 | 20.3 | 1487.1 | 1.2 |
| 98 | 1001 1110 | 1491.25 | 1496.2 | 0.0 | 0.7 | 7.9 | 1494.0 | -6.7 |
| 99 | 1001 1101 | 1506.88 | 1523.4 | -0.3 | -0.6 | 27.2 | 1518.8 | 4.6 |
| 100 | 1001 1100 | 1522.50 | 1535.0 | -0.7 | -0.6 | 11.5 | 1534.6 | 0.1 |
| 101 | 1001 1011 | 1538.13 | 1550.2 | 0.7 | 0.6 | 15.2 | 1549.5 | -0.3 |
| 102 | 1001 1010 | 1553.75 | 1564.3 | 0.6 | 0.6 | 14.2 | 1566.3 | -2.0 |
| 103 | 1001 1001 | 1569.38 | 1588.9 | -0.7 | -0.1 | 24.6 | 1587.1 | 6.8 |
| 104 | 1001 1000 | 1585.00 | 1594.8 | -0.7 | -0.7 | 5.8 | 1598.0 | -1.2 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 64
 1981/12/02 08:15:34 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH RUN
 3.5.3.5-4 A/D THRESHOLD TEST (RANGE) NO SENSITIVE



| HRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--------------------|-------------------------|------------------------|---------------------------|------------------------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO-
LOWER | UPPER | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1611.2 | 0.1 | -0.6 | 16.4 | 1613.8 | -7.6 |
| 106 | 1001 0110 | 1616.25 | 1624.2 | 0.6 | 0.6 | 13.0 | 1629.7 | -15.4 |
| 107 | 1001 0101 | 1631.88 | 1649.0 | 0.5 | 0.6 | 24.7 | 1641.5 | 3.5 |
| 108 | 1001 0100 | 1647.50 | 1662.8 | -0.6 | -0.6 | 13.8 | 1661.9 | 1.5 |
| 109 | 1001 0011 | 1663.13 | 1675.8 | -0.6 | -0.5 | 13.0 | 1677.2 | -1.5 |
| 110 | 1001 0010 | 1678.75 | 1692.2 | 0.6 | 0.0 | 16.4 | 1691.0 | -0.8 |
| 111 | 1001 0001 | 1694.38 | 1714.1 | 0.6 | 0.6 | 21.8 | 1708.8 | 5.2 |
| 112 | 1001 0000 | 1710.00 | 1730.8 | -0.0 | 0.6 | 16.7 | 1724.7 | 6.1 |
| 113 | 1000 1111 | 1725.63 | 1739.7 | -0.5 | -0.6 | 8.9 | 1740.5 | -0.8 |
| 114 | 1000 1110 | 1741.25 | 1748.0 | -0.7 | -0.7 | 8.3 | 1756.4 | -8.4 |
| 115 | 1000 1101 | 1756.88 | 1774.7 | 0.5 | -0.6 | 26.7 | 1772.2 | 2.5 |
| 116 | 1000 1100 | 1772.50 | 1785.1 | 0.6 | 0.6 | 10.4 | 1788.0 | -2.9 |
| 117 | 1000 1011 | 1788.13 | 1801.9 | -0.7 | -0.1 | 16.8 | 1803.9 | -1.9 |
| 118 | 1000 1010 | 1803.75 | 1816.0 | -0.7 | -0.7 | 14.0 | 1819.2 | -3.7 |
| 119 | 1000 1001 | 1819.38 | 1839.8 | 0.1 | -0.6 | 23.8 | 1831.6 | 4.2 |
| 120 | 1000 1000 | 1835.00 | 1850.8 | 0.7 | 0.7 | 11.0 | 1851.4 | -0.6 |
| 121 | 1000 0111 | 1850.63 | 1861.6 | 0.6 | 0.6 | 10.8 | 1867.2 | -7.6 |
| 122 | 1000 0110 | 1866.25 | 1875.8 | -0.7 | -0.7 | 14.2 | 1881.1 | -7.3 |
| 123 | 1000 0101 | 1881.88 | 1900.4 | -0.6 | -0.6 | 24.6 | 1898.9 | 1.5 |
| 124 | 1000 0100 | 1897.50 | 1914.6 | 0.6 | -0.0 | 14.1 | 1914.7 | -0.2 |
| 125 | 1000 0011 | 1913.13 | 1926.3 | 0.6 | 0.6 | 11.2 | 1930.6 | -4.3 |
| 126 | 1000 0010 | 1928.75 | 1943.1 | 0.0 | 0.6 | 16.8 | 1946.4 | -3.3 |
| 127 | 1000 0001 | 1944.38 | 1965.3 | -0.5 | -0.5 | 22.2 | 1962.3 | 3.1 |
| 128 | 1000 0000 | 1960.00 | 1981.8 | -0.8 | -0.8 | 16.5 | 1978.1 | 3.7 |
| 129 | 0111 1111 | 1975.63 | 1991.0 | 0.6 | 0.6 | 9.2 | 1993.9 | -2.9 |
| 130 | 0111 1110 | 1991.25 | 2004.5 | 0.6 | 0.6 | 13.5 | 2009.3 | -1.2 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODIFIED FLT. S/N PAGE 66
 1981/12/02 08:15:34 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3+5+4+5+4 AND THRESHOLD TEST CRONOS 140 10/10/10/10/10

HAC
 TEST
 527
 DEC 02 '81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDFAI
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCR/DECR
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|----------------------------|-------|-------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO= 1:1
LOWER | UPPER | | POINT | DEVIATION |
| 158 | 0110 0010 | 2428.75 | 2452.0 | 0.7 | 0.7 | 19.3 | 2453.2 | -1.2 |
| 159 | 0110 0001 | 2444.38 | 2473.7 | -0.6 | -0.0 | 21.7 | 2469.1 | 4.6 |
| 160 | 0110 0000 | 2460.00 | 2477.0 | -0.8 | -0.8 | 3.4 | 2484.9 | -7.9 |
| 161 | 0101 1111 | 2475.63 | 2495.8 | 0.1 | -0.6 | 18.7 | 2500.7 | -5.0 |
| 162 | 0101 1110 | 2491.25 | 2508.0 | 0.7 | 0.7 | 12.2 | 2516.6 | -8.6 |
| 163 | 0101 1101 | 2506.88 | 2534.3 | 0.7 | 0.6 | 26.3 | 2532.4 | 1.8 |
| 164 | 0101 1100 | 2522.50 | 2544.7 | -0.7 | -0.7 | 10.4 | 2548.2 | -3.6 |
| 165 | 0101 1011 | 2538.13 | 2561.1 | -0.7 | -0.6 | 16.4 | 2564.1 | -3.0 |
| 166 | 0101 1010 | 2553.75 | 2576.7 | 0.6 | -0.0 | 15.6 | 2579.9 | -3.2 |
| 167 | 0101 1001 | 2569.38 | 2600.6 | 0.6 | 0.7 | 23.9 | 2595.8 | 4.9 |
| 168 | 0101 1000 | 2585.00 | 2606.6 | 0.1 | 0.7 | 6.0 | 2611.6 | -5.0 |
| 169 | 0101 0111 | 2600.63 | 2621.9 | -0.6 | -0.6 | 15.3 | 2627.4 | -5.5 |
| 170 | 0101 0110 | 2616.25 | 2636.7 | -0.7 | -0.7 | 14.8 | 2643.3 | -6.6 |
| 171 | 0101 0101 | 2631.88 | 2660.5 | 0.6 | 0.6 | 23.8 | 2659.1 | 1.4 |
| 172 | 0101 0100 | 2647.50 | 2676.9 | 0.6 | 0.7 | 16.4 | 2674.9 | 2.0 |
| 173 | 0101 0011 | 2663.13 | 2686.5 | -0.6 | 0.1 | 9.5 | 2690.8 | -4.3 |
| 174 | 0101 0010 | 2678.75 | 2704.9 | -0.7 | -0.7 | 18.4 | 2706.6 | -1.8 |
| 175 | 0101 0001 | 2694.38 | 2726.6 | -0.1 | -0.6 | 21.8 | 2722.5 | 4.2 |
| 176 | 0101 0000 | 2710.00 | 2741.1 | 0.7 | 0.7 | 14.4 | 2738.3 | 2.8 |
| 177 | 0100 1111 | 2725.63 | 2746.6 | 0.6 | 0.7 | 5.5 | 2754.1 | -7.5 |
| 178 | 0100 1110 | 2741.25 | 2760.1 | -0.7 | -0.7 | 13.5 | 2770.0 | -9.8 |
| 179 | 0100 1101 | 2756.88 | 2786.5 | -0.5 | -0.4 | 26.4 | 2785.8 | 0.7 |
| 180 | 0100 1100 | 2772.50 | 2798.5 | 0.7 | 0.0 | 11.9 | 2801.6 | -3.2 |
| 181 | 0100 1011 | 2788.13 | 2812.1 | 0.6 | 0.6 | 13.6 | 2817.5 | -5.4 |
| 182 | 0100 1010 | 2803.75 | 2827.5 | -0.0 | 0.7 | 15.4 | 2833.3 | -1.9 |
| 183 | 0100 1001 | 2819.38 | 2852.6 | -0.7 | -0.7 | 25.1 | 2849.2 | 3.4 |

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-236 - 110 MATHS MAPPER MUX UNIT TEST MODEL.. FL1. SZN PAGE 70

01/12/02 00:21:59 PENALTY ACCEPTANCE @ AMBIENT TEMP, VOLTAGE MARGIN HIGHER

TEST 1: 1.5V - 3.0V THRESHOLD 1.0V TEST 2: 3.0V - 4.5V THRESHOLD 1.0V

5.0V 1.0V 1.0V 1.0V

000200

OK 1) RMS ERROR, 2) THRESHOLD INCREMENT(+/- 0.0 = THRESH INC = 0.2)

REMAINING DATA ARE FOR INFORMATION ONLY

TEST 1: 1.5V - 3.0V THRESHOLD 1.0V TEST 2: 3.0V - 4.5V THRESHOLD 1.0V

DEVIATION OF SLOPE FROM IDEAL IS: 1.450%

OFFSET IS: -0.90V

COEFFICIENT OF DETERMINATION IS: R**2= .99990320

ANALOG INPUT DURING DC RESTORE IS: 63.0MV

RMS ERROR = 4.738MV REPORT: 1999 ERROR = 4.738MV

THRESHOLD 1.0V INCREMENT MEASUREMENT

| MAXIMUM | THRESHOLD 1 | AVERAGE | MINIMUM | THRESHOLD 1 | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 29.1MV | 243 | 15.911MV | 1.4MV | 32 | 1.911MV |

POWER INPUT AT OUTPUT LEVELS RATIO = 1.0

| MAXIMUM | THRESHOLD 1 | AVERAGE | MINIMUM | THRESHOLD 1 | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 1.0MV | 96 | -0.144MV | -6.8MV | 278 | 1.118MV |

POWER INPUT AT OUTPUT LEVELS RATIO = 1.0

| MAXIMUM | THRESHOLD 1 | AVERAGE | MINIMUM | THRESHOLD 1 | STANDARD DEVIATION |
|---------|-------------|---------|---------|-------------|--------------------|
| 3.6MV | 79 | 0.034MV | -1.1MV | 168 | 0.374MV |

TEST PASSED

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3-236 THEMATIC MAPPER MUX UNIT TEST MOD1.. FLT. S/N PAGE 71
 281/12/02 08:22:13 FINALITY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 45.3.5-11 AND THRESHOLD TEST CHANNELS 40 145.00140.00 10

DEC 02 '01

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO= 1:1
NOMINAL LOWER UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT DEVIATION |
|--|------------------------|---|------------------------------------|---|
|--|------------------------|---|------------------------------------|---|

IF FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | | |
|----|-----------|---------|-------|------|------|------|-------|-------|
| 1 | 1111 1111 | -24.375 | -40.6 | 0.4 | -0.6 | | -36.0 | -4.6 |
| 2 | 1111 1110 | -8.750 | -28.5 | 0.9 | -0.0 | 12.1 | -20.2 | -11.3 |
| 3 | 1111 1101 | 6.875 | -3.5 | 0.8 | 0.8 | 25.0 | -4.3 | 0.9 |
| 4 | 1111 1100 | 22.500 | 10.5 | -0.0 | 0.9 | 14.0 | 11.5 | -1.0 |
| 5 | 1111 1011 | 38.125 | 24.7 | -0.7 | -0.8 | 14.2 | 27.4 | -2.2 |
| 6 | 1111 1010 | 53.750 | 40.9 | -1.1 | -1.0 | 16.2 | 43.2 | -2.3 |
| 7 | 1111 1001 | 69.375 | 62.6 | 0.8 | 0.0 | 21.7 | 59.1 | 3.5 |
| 8 | 1111 1000 | 85.000 | 67.6 | 0.9 | 1.0 | 5.0 | 74.9 | -7.3 |
| 9 | 1111 0111 | 100.625 | 86.5 | -0.9 | -0.0 | 18.9 | 90.8 | -4.2 |
| 10 | 1111 0110 | 116.250 | 102.5 | -0.9 | -0.9 | 15.9 | 106.6 | -4.2 |
| 11 | 1111 0101 | 131.875 | 125.1 | -0.1 | -0.8 | 22.7 | 122.5 | 2.7 |
| 12 | 1111 0100 | 147.500 | 141.6 | 0.8 | 0.9 | 16.4 | 138.3 | 3.2 |
| 13 | 1111 0011 | 163.125 | 151.8 | 0.7 | 0.7 | 10.2 | 154.2 | -2.4 |
| 14 | 1111 0010 | 178.750 | 170.9 | -1.0 | -0.0 | 19.1 | 170.0 | 0.8 |
| 15 | 1111 0001 | 194.375 | 191.5 | -0.9 | -0.8 | 20.6 | 185.9 | 5.6 |
| 16 | 1111 0000 | 210.000 | 200.1 | 0.9 | 0.1 | 8.7 | 201.7 | -1.6 |
| 17 | 1110 1111 | 225.625 | 212.7 | 0.8 | 0.8 | 12.6 | 217.6 | -4.8 |
| 18 | 1110 1110 | 241.250 | 227.1 | -0.1 | 0.9 | 14.4 | 233.4 | -6.3 |
| 19 | 1110 1101 | 256.875 | 252.5 | -0.8 | -0.8 | 25.4 | 249.3 | 3.3 |
| 20 | 1110 1100 | 272.500 | 269.7 | -0.9 | -0.9 | 17.1 | 265.1 | 4.5 |
| 21 | 1110 1011 | 288.125 | 279.5 | 0.7 | 0.6 | 9.8 | 281.0 | -1.5 |
| 22 | 1110 1010 | 303.750 | 295.5 | 0.8 | 0.9 | 16.0 | 294.8 | -1.3 |
| 23 | 1110 1001 | 319.375 | 318.8 | -0.9 | 0.0 | 23.2 | 312.7 | 6.1 |
| 24 | 1110 1000 | 335.000 | 328.0 | -1.0 | -0.9 | 9.2 | 328.6 | -0.5 |
| 25 | 1110 0111 | 350.625 | 341.6 | -0.0 | -0.9 | 13.6 | 344.4 | -2.8 |

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IS-236 THERMATIC MAP/ITER MIX UNIT TEST MODEL.. FLT. S/N PAGE 22

981/12/02 08:22:13 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH PASS

1-5-14-5-14-4 AND THRESHOLD TEST CHANNEL - 4 - 1-5-14-5-14-4



| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 26 | 1110 0110 | 366.250 | 357.1 | 0.8 | 0.9 | 15.4 | 360.3 | -3.2 |
| 27 | 1110 0101 | 381.875 | 379.6 | 0.8 | 0.8 | 22.5 | 376.1 | 3.5 |
| 28 | 1110 0100 | 397.500 | 401.0 | -1.0 | -0.9 | 21.4 | 392.0 | 9.0 |
| 29 | 1110 0011 | 413.125 | 407.7 | -0.8 | -0.9 | 6.7 | 407.8 | -0.1 |
| 30 | 1110 0010 | 428.750 | 425.3 | 0.9 | 0.0 | 17.6 | 423.7 | 1.6 |
| 31 | 1110 0001 | 444.375 | 445.6 | 0.7 | 0.8 | 20.4 | 439.5 | 6.1 |
| 32 | 1110 0000 | 460.000 | 447.0 | -0.0 | 1.0 | 1.4 | 457.4 | -8.3 |
| 33 | 1101 1111 | 475.625 | 468.9 | -0.9 | -0.8 | 21.9 | 471.2 | -2.3 |
| 34 | 1101 1110 | 491.250 | 483.1 | -1.0 | -0.9 | 14.1 | 487.1 | -4.0 |
| 35 | 1101 1101 | 506.875 | 507.6 | 0.7 | 0.8 | 24.5 | 502.9 | 4.7 |
| 36 | 1101 1100 | 522.500 | 521.9 | 0.8 | 0.9 | 14.3 | 518.8 | 1.1 |
| 37 | 1101 1011 | 538.125 | 535.6 | -0.7 | -0.1 | 13.7 | 534.6 | 1.0 |
| 38 | 1101 1010 | 553.750 | 551.3 | -1.0 | -0.9 | 15.6 | 550.5 | 0.3 |
| 39 | 1101 1001 | 569.375 | 574.3 | -0.0 | -0.8 | 23.0 | 566.3 | 3.0 |
| 40 | 1101 1000 | 585.000 | 580.3 | 1.0 | 1.0 | 6.0 | 582.2 | -1.9 |
| 41 | 1101 0111 | 600.625 | 595.9 | 0.8 | 0.8 | 15.6 | 598.0 | -2.1 |
| 42 | 1101 0110 | 616.250 | 612.6 | -0.9 | -0.9 | 16.7 | 613.9 | -1.3 |
| 43 | 1101 0101 | 631.875 | 635.9 | -0.9 | -0.8 | 23.3 | 629.7 | 6.2 |
| 44 | 1101 0100 | 647.500 | 652.4 | 0.9 | -0.0 | 16.5 | 645.6 | 6.8 |
| 45 | 1101 0011 | 663.125 | 667.0 | 0.6 | 0.8 | 9.6 | 661.4 | 0.6 |
| 46 | 1101 0010 | 678.750 | 679.7 | 0.0 | 0.9 | 17.7 | 677.3 | 2.4 |
| 47 | 1101 0001 | 694.375 | 698.0 | -0.8 | 2.7 | 18.3 | 693.1 | 4.9 |
| 48 | 1101 0000 | 710.000 | 714.2 | -0.9 | -0.9 | 16.2 | 709.0 | 5.2 |
| 49 | 1100 1111 | 725.625 | 727.3 | 0.8 | 0.8 | 8.1 | 724.8 | -2.5 |
| 50 | 1100 1110 | 741.250 | 736.5 | 0.8 | 0.8 | 14.2 | 740.7 | -4.2 |
| 51 | 1100 1101 | 756.875 | 762.3 | -0.9 | 0.0 | 25.8 | 756.5 | 5.7 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 23
 1981/12/02 08:22:13 FINALITY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.3.5.4 AND THRESHOLD TEST CHANNEL = 4.7 514 14154 14154



000281

| THRESHOLD
NUMBER | A/D
THRESHOLD | A/D
OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|------------------|----------------------------|------------------------|---------------------------|----------------------------|-------|------------------------------------|------------------------|-----------|
| | | | | NOMINAL | LEVELS RATIO= 1:1
LOWER | UPPER | | POINT | DEVIATION |
| 52 | 1100 | 1100 | 772.500 | 779.5 | -1.0 | -0.9 | 17.2 | 772.4 | 7.1 |
| 53 | 1100 | 1011 | 788.125 | 789.6 | -0.0 | -0.8 | 10.0 | 788.2 | 1.3 |
| 54 | 1100 | 1010 | 803.750 | 804.4 | 0.8 | 0.9 | 14.8 | 804.1 | 0.3 |
| 55 | 1100 | 1001 | 819.375 | 827.2 | 0.7 | 0.8 | 22.9 | 819.9 | 7.3 |
| 56 | 1100 | 1000 | 835.000 | 839.8 | -1.0 | -1.1 | 12.4 | 835.8 | 4.0 |
| 57 | 1100 | 0111 | 850.625 | 850.2 | -0.8 | -0.8 | 10.3 | 851.7 | -1.5 |
| 58 | 1100 | 0110 | 866.250 | 865.3 | 0.9 | 0.0 | 15.1 | 867.5 | -2.2 |
| 59 | 1100 | 0101 | 881.875 | 888.4 | 0.7 | 0.8 | 23.1 | 883.4 | 5.0 |
| 60 | 1100 | 0100 | 897.500 | 909.1 | 0.0 | 0.9 | 20.7 | 899.2 | 9.9 |
| 61 | 1100 | 0011 | 913.125 | 915.9 | -0.8 | -0.8 | 6.8 | 915.1 | 0.8 |
| 62 | 1100 | 0010 | 928.750 | 933.9 | -0.9 | -0.8 | 10.0 | 930.9 | 3.0 |
| 63 | 1100 | 0001 | 944.375 | 950.1 | 0.8 | 0.0 | 16.2 | 946.8 | 3.3 |
| 64 | 1100 | 0000 | 960.000 | 963.9 | 1.0 | 1.0 | 13.8 | 962.6 | 1.2 |
| 65 | 1011 | 1111 | 975.625 | 976.6 | -1.0 | -0.0 | 17.7 | 978.5 | -1.9 |
| 66 | 1011 | 1110 | 991.250 | 990.3 | -0.9 | -0.9 | 13.7 | 994.3 | -4.0 |
| 67 | 1011 | 1101 | 1006.88 | 1016.6 | 0.0 | -0.9 | 26.3 | 1010.2 | 6.4 |
| 68 | 1011 | 1100 | 1022.50 | 1028.5 | 0.9 | 0.9 | 11.9 | 1026.0 | 2.5 |
| 69 | 1011 | 1011 | 1038.13 | 1041.7 | 0.8 | 0.7 | 13.2 | 1041.9 | -0.2 |
| 70 | 1011 | 1010 | 1053.75 | 1057.8 | -0.9 | 0.0 | 16.1 | 1057.2 | 0.1 |
| 71 | 1011 | 1001 | 1069.38 | 1081.0 | -0.9 | -0.9 | 23.1 | 1073.6 | 7.4 |
| 72 | 1011 | 1000 | 1085.00 | 1084.4 | 1.0 | 0.0 | 3.4 | 1089.4 | -5.1 |
| 73 | 1011 | 0111 | 1100.63 | 1102.4 | 0.8 | 0.9 | 18.1 | 1105.3 | -2.8 |
| 74 | 1011 | 0110 | 1116.25 | 1117.8 | 0.0 | 0.9 | 15.3 | 1121.1 | -3.3 |
| 75 | 1011 | 0101 | 1131.88 | 1143.0 | -0.8 | -0.9 | 25.2 | 1137.0 | 6.0 |
| 76 | 1011 | 0100 | 1147.50 | 1158.6 | -0.9 | -0.9 | 15.6 | 1152.8 | 5.7 |
| 77 | 1011 | 0011 | 1163.13 | 1167.9 | 0.8 | -0.1 | 9.3 | 1168.2 | -0.8 |
| 78 | 1011 | 0010 | 1178.75 | 1185.3 | 0.9 | 0.9 | 17.5 | 1184.5 | 0.8 |

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527

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | TDIAL
VALUE
(MV) | ANALOG
INPUT VOLTAGE
LEVELS RATIO=
NOMINAL | INPUT VOLTAGE
LOWER | (MV)
1 : 1
UPPER | INCREASE
FROM TRI V
THRESHOLD | BEST FIT STRAIGHT LINE
POINT | DEVIATION |
|---------------------|-------------------------|------------------------|---|------------------------|------------------------|-------------------------------------|---------------------------------|-----------|
| 79 | 1011 0001 | 1194.38 | 1203.7 | -0.8 | 3.6 | 18.3 | 1200.4 | 3.3 |
| 80 | 1011 0000 | 1210.00 | 1220.1 | -0.9 | -0.9 | 16.4 | 1216.2 | 3.8 |
| 81 | 1010 1111 | 1225.63 | 1228.7 | 0.0 | -0.9 | 8.7 | 1232.1 | -3.3 |
| 82 | 1010 1110 | 1241.25 | 1241.8 | 1.0 | 0.9 | 13.0 | 1247.9 | -6.1 |
| 83 | 1010 1101 | 1256.88 | 1267.8 | 0.8 | 0.9 | 26.0 | 1263.8 | 4.0 |
| 84 | 1010 1100 | 1272.50 | 1284.6 | -0.9 | -0.0 | 16.8 | 1279.6 | 4.9 |
| 85 | 1010 1011 | 1288.13 | 1294.7 | -0.8 | -0.9 | 10.1 | 1295.5 | -0.8 |
| 86 | 1010 1010 | 1303.75 | 1309.3 | 0.9 | -0.0 | 14.6 | 1311.3 | -2.1 |
| 87 | 1010 1001 | 1319.38 | 1332.5 | 0.8 | 0.7 | 23.2 | 1327.2 | 5.3 |
| 88 | 1010 1000 | 1335.00 | 1341.3 | -0.0 | 0.9 | 8.8 | 1343.1 | -1.7 |
| 89 | 1010 0111 | 1350.63 | 1355.1 | -0.8 | -0.9 | 13.8 | 1358.9 | -3.8 |
| 90 | 1010 0110 | 1366.25 | 1370.9 | -0.9 | -0.9 | 15.8 | 1374.8 | -3.9 |
| 91 | 1010 0101 | 1381.88 | 1394.0 | 0.8 | -0.0 | 23.1 | 1390.6 | 3.4 |
| 92 | 1010 0100 | 1397.50 | 1413.1 | 0.9 | 0.9 | 19.2 | 1406.5 | 6.7 |
| 93 | 1010 0011 | 1413.13 | 1420.5 | -0.9 | -0.1 | 7.4 | 1422.3 | -1.8 |
| 94 | 1010 0010 | 1428.75 | 1438.4 | -0.8 | -0.9 | 17.3 | 1438.2 | 0.2 |
| 95 | 1010 0001 | 1444.38 | 1459.2 | -3.7 | -0.8 | 20.8 | 1454.0 | 5.2 |
| 96 | 1010 0000 | 1460.00 | 1464.2 | 1.0 | 0.7 | 5.0 | 1469.9 | -5.6 |
| 97 | 1001 1111 | 1475.63 | 1480.1 | 0.8 | 0.8 | 15.8 | 1485.7 | -5.6 |
| 98 | 1001 1110 | 1491.25 | 1494.7 | -1.0 | -0.1 | 14.6 | 1501.6 | -6.8 |
| 99 | 1001 1101 | 1506.88 | 1521.1 | -0.9 | -0.9 | 26.4 | 1517.4 | 3.7 |
| 100 | 1001 1100 | 1522.50 | 1533.5 | 0.9 | 0.0 | 12.4 | 1534.3 | 0.2 |
| 101 | 1001 1011 | 1538.13 | 1546.3 | 0.8 | 0.8 | 12.8 | 1549.1 | -2.8 |
| 102 | 1001 1010 | 1553.75 | 1561.2 | 0.0 | 0.9 | 14.9 | 1559.0 | -3.8 |
| 103 | 1001 1001 | 1569.38 | 1586.0 | -0.8 | -0.8 | 24.8 | 1580.8 | 5.2 |
| 104 | 1001 1000 | 1585.00 | 1591.9 | -0.9 | -0.9 | 5.9 | 1596.2 | -4.8 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL., FLT. S/N PAGE 70
 1981/12/02 08:22:13 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.5-H A/D THRESHOLD TEST (BAND)= 40 GENSER=1



DEC 02 '81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | TDFAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|----------------------------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO= 1:1
LOWER | UPPER | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1606.6 | 0.8 | 0.9 | 14.7 | 1612.5 | -5.9 |
| 106 | 1001 0110 | 1616.25 | 1622.0 | 0.9 | 0.9 | 15.4 | 1628.4 | -6.4 |
| 107 | 1001 0101 | 1631.88 | 1647.4 | -0.9 | 0.0 | 25.4 | 1644.2 | 3.1 |
| 108 | 1001 0100 | 1647.50 | 1663.6 | -1.0 | -1.0 | 16.3 | 1660.1 | 3.6 |
| 109 | 1001 0011 | 1663.13 | 1672.9 | 0.1 | -0.9 | 9.3 | 1675.9 | -3.0 |
| 110 | 1001 0010 | 1678.75 | 1689.4 | 0.9 | 0.9 | 16.5 | 1691.8 | -2.3 |
| 111 | 1001 0001 | 1694.38 | 1711.2 | 0.7 | 0.8 | 21.7 | 1707.6 | 3.5 |
| 112 | 1001 0000 | 1710.00 | 1727.6 | -0.9 | -0.9 | 16.4 | 1724.5 | 4.1 |
| 113 | 1000 1111 | 1725.63 | 1732.9 | -0.8 | -0.8 | 5.3 | 1739.3 | -6.5 |
| 114 | 1000 1110 | 1741.25 | 1745.8 | 0.9 | -0.0 | 13.0 | 1755.2 | -9.4 |
| 115 | 1000 1101 | 1756.88 | 1772.0 | 0.8 | 0.8 | 26.1 | 1771.0 | 0.9 |
| 116 | 1000 1100 | 1772.50 | 1783.4 | 0.0 | 0.9 | 11.4 | 1786.9 | -3.5 |
| 117 | 1000 1011 | 1788.13 | 1798.9 | -0.9 | -0.9 | 15.5 | 1802.7 | -3.8 |
| 118 | 1000 1010 | 1803.75 | 1814.2 | -1.0 | -0.9 | 15.3 | 1818.6 | -4.4 |
| 119 | 1000 1001 | 1819.38 | 1837.5 | 0.8 | -0.1 | 23.4 | 1834.4 | 3.1 |
| 120 | 1000 1000 | 1835.00 | 1847.8 | 0.9 | 0.7 | 10.2 | 1850.3 | -2.5 |
| 121 | 1000 0111 | 1850.63 | 1859.1 | -0.9 | 0.0 | 11.3 | 1866.2 | -7.0 |
| 122 | 1000 0110 | 1866.25 | 1874.8 | -0.8 | -0.9 | 15.6 | 1882.0 | -7.2 |
| 123 | 1000 0101 | 1881.88 | 1899.0 | 0.0 | -0.9 | 24.2 | 1897.9 | 1.1 |
| 124 | 1000 0100 | 1897.50 | 1917.9 | 0.9 | 0.9 | 19.0 | 1913.7 | 4.2 |
| 125 | 1000 0011 | 1913.13 | 1923.7 | 0.8 | 0.8 | 5.8 | 1929.6 | -5.8 |
| 126 | 1000 0010 | 1928.75 | 1942.3 | -0.9 | -0.1 | 18.5 | 1941.4 | -3.2 |
| 127 | 1000 0001 | 1944.38 | 1963.8 | -0.8 | -0.8 | 21.6 | 1961.3 | 2.6 |
| 128 | 1000 0000 | 1960.00 | 1983.5 | 0.9 | -0.1 | 19.6 | 1977.1 | 6.4 |
| 129 | 0111 1111 | 1975.63 | 1989.5 | 0.8 | 0.9 | 6.0 | 1993.0 | -3.5 |
| 130 | 0111 1110 | 1991.25 | 2004.2 | -0.1 | 0.9 | 14.7 | 2008.8 | -4.6 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 76
 1981/12/02 08:22:13 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.5-4 A/D THRESHOLD TEST (BAND)= 4. SENSITIVITY= 1



DEC 02 '81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 131 | 0111 1101 | 2006.88 | 2029.2 | -0.8 | -0.9 | 25.1 | 2024.7 | 4.6 |
| 132 | 0111 1100 | 2022.50 | 2045.4 | -0.9 | -0.9 | 16.1 | 2040.5 | 4.9 |
| 133 | 0111 1011 | 2038.13 | 2055.4 | 0.8 | -0.1 | 10.0 | 2056.4 | -1.0 |
| 134 | 0111 1010 | 2053.75 | 2071.6 | 0.9 | 0.8 | 16.2 | 2072.2 | -0.6 |
| 135 | 0111 1001 | 2069.38 | 2094.9 | -0.8 | 0.1 | 23.2 | 2088.1 | 6.8 |
| 136 | 0111 1000 | 2085.00 | 2099.7 | -0.9 | -1.0 | 4.9 | 2101.9 | -4.2 |
| 137 | 0111 0111 | 2100.63 | 2117.1 | 0.0 | -0.9 | 17.4 | 2119.8 | -2.7 |
| 138 | 0111 0110 | 2116.25 | 2132.5 | 1.0 | 1.0 | 15.4 | 2131.6 | -3.1 |
| 139 | 0111 0101 | 2131.88 | 2154.8 | 0.9 | 0.9 | 22.3 | 2151.5 | 3.3 |
| 140 | 0111 0100 | 2147.50 | 2174.4 | -1.0 | -0.0 | 19.7 | 2167.3 | 7.1 |
| 141 | 0111 0011 | 2163.13 | 2182.3 | -0.9 | -0.9 | 7.9 | 2183.2 | -0.9 |
| 142 | 0111 0010 | 2178.75 | 2200.0 | 0.9 | 0.0 | 17.7 | 2199.0 | 1.0 |
| 143 | 0111 0001 | 2194.38 | 2220.4 | 0.9 | 0.8 | 20.3 | 2214.9 | 5.5 |
| 144 | 0111 0000 | 2210.00 | 2232.0 | 0.0 | 0.9 | 11.7 | 2230.2 | 1.3 |
| 145 | 0110 1111 | 2225.63 | 2242.5 | -0.9 | -0.9 | 10.4 | 2246.6 | -4.1 |
| 146 | 0110 1110 | 2241.25 | 2257.4 | -0.9 | -0.9 | 14.9 | 2262.4 | -5.1 |
| 147 | 0110 1101 | 2256.88 | 2283.1 | 0.8 | -0.1 | 25.7 | 2278.3 | 4.8 |
| 148 | 0110 1100 | 2272.50 | 2299.8 | -5.0 | 0.9 | 16.7 | 2294.1 | 5.4 |
| 149 | 0110 1011 | 2288.13 | 2308.4 | -0.8 | 0.0 | 8.6 | 2310.0 | -1.6 |
| 150 | 0110 1010 | 2303.75 | 2324.9 | -0.9 | -0.9 | 16.6 | 2325.8 | -0.9 |
| 151 | 0110 1001 | 2319.38 | 2347.0 | 0.0 | -0.9 | 27.0 | 2341.7 | 5.3 |
| 152 | 0110 1000 | 2335.00 | 2356.3 | 1.0 | 1.1 | 9.3 | 2357.6 | -1.1 |
| 153 | 0110 0111 | 2350.63 | 2368.1 | 1.0 | 0.9 | 11.8 | 2373.4 | -5.3 |
| 154 | 0110 0110 | 2366.25 | 2385.6 | -0.9 | -1.0 | 17.5 | 2389.3 | -3.6 |
| 155 | 0110 0101 | 2381.88 | 2407.7 | -0.8 | -0.8 | 22.1 | 2405.1 | 2.6 |
| 156 | 0110 0100 | 2397.50 | 2429.0 | 0.8 | 0.0 | 21.2 | 2421.0 | 8.0 |
| 157 | 0110 0011 | 2413.13 | 2433.5 | 0.8 | 0.7 | 4.6 | 2436.8 | -3.3 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N. PAGE 77
 1981/12/02 08:27:13 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.5-4 A/D THRESHOLD TEST (BAND= 4, PENALTY=1)



020281

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 158 | 0110 0010 | 2428.75 | 2452.2 | -0.0 | 1.0 | 18.7 | 2452.7 | -0.4 |
| 159 | 0110 0001 | 2444.38 | 2473.2 | -0.9 | -0.9 | 21.0 | 2468.5 | 4.7 |
| 160 | 0110 0000 | 2460.00 | 2479.1 | -1.0 | -1.0 | 5.9 | 2484.4 | -5.3 |
| 161 | 0101 1111 | 2475.63 | 2494.1 | 0.9 | 0.9 | 15.0 | 2500.2 | -6.2 |
| 162 | 0101 1110 | 2491.25 | 2508.6 | 1.0 | 0.9 | 14.6 | 2516.1 | -7.4 |
| 163 | 0101 1101 | 2506.88 | 2534.3 | -0.8 | 2.5 | 25.6 | 2531.9 | 2.3 |
| 164 | 0101 1100 | 2522.50 | 2550.8 | -1.0 | -0.9 | 16.5 | 2547.9 | 3.0 |
| 165 | 0101 1011 | 2538.13 | 2561.1 | 0.1 | -0.7 | 10.3 | 2563.6 | -2.5 |
| 166 | 0101 1010 | 2553.75 | 2576.0 | 0.8 | 0.9 | 14.9 | 2579.5 | -3.5 |
| 167 | 0101 1001 | 2569.38 | 2598.9 | 0.8 | 0.9 | 22.8 | 2595.3 | 3.5 |
| 168 | 0101 1000 | 2585.00 | 2606.6 | -1.0 | -1.1 | 7.7 | 2611.2 | -4.6 |
| 169 | 0101 0111 | 2600.63 | 2621.6 | -0.9 | -0.9 | 15.0 | 2627.0 | -5.4 |
| 170 | 0101 0110 | 2616.25 | 2636.9 | 0.9 | 0.0 | 15.3 | 2642.9 | -6.0 |
| 171 | 0101 0101 | 2631.88 | 2659.7 | 0.9 | 0.8 | 22.8 | 2658.7 | 1.0 |
| 172 | 0101 0100 | 2647.50 | 2678.7 | 0.1 | 1.0 | 19.0 | 2674.6 | 4.1 |
| 173 | 0101 0011 | 2663.13 | 2687.2 | -0.9 | -0.9 | 8.5 | 2690.4 | -3.2 |
| 174 | 0101 0010 | 2678.75 | 2705.4 | -1.0 | -0.9 | 18.2 | 2706.3 | -0.9 |
| 175 | 0101 0001 | 2694.38 | 2725.2 | 0.8 | 0.8 | 19.8 | 2722.1 | 3.0 |
| 176 | 0101 0000 | 2710.00 | 2740.3 | 0.9 | 1.0 | 15.1 | 2738.0 | 2.3 |
| 177 | 0100 1111 | 2725.63 | 2747.2 | -1.0 | 0.0 | 6.9 | 2753.8 | -6.7 |
| 178 | 0100 1110 | 2741.25 | 2761.9 | -0.9 | -0.9 | 14.8 | 2769.7 | -7.7 |
| 179 | 0100 1101 | 2756.88 | 2788.7 | 0.0 | -0.8 | 26.8 | 2785.5 | 3.2 |
| 180 | 0100 1100 | 2772.50 | 2798.8 | 0.9 | 0.9 | 10.0 | 2801.4 | -2.6 |
| 181 | 0100 1011 | 2788.13 | 2812.6 | 0.9 | 0.9 | 13.8 | 2817.2 | -4.6 |
| 182 | 0100 1010 | 2803.75 | 2829.4 | -0.9 | -1.0 | 16.4 | 2823.1 | -3.7 |
| 183 | 0100 1001 | 2819.38 | 2852.0 | -0.9 | -0.9 | 22.6 | 2848.9 | 3.0 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL .. FLT. S/N PAGE 78
 1981/12/02 08:27:13 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.5-4 A/D THRESHOLD TEST (RAND= 47 PENSON=1)

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 184 | 0100 1000 | 2835.00 | 2863.5 | 1.0 | -0.1 | 11.5 | 2864.8 | -1.3 |
| 185 | 0100 0111 | 2850.63 | 2872.9 | 0.9 | 0.9 | 9.4 | 2880.7 | -7.7 |
| 186 | 0100 0110 | 2866.25 | 2889.4 | 0.0 | 1.0 | 16.5 | 2896.5 | -7.1 |
| 187 | 0100 0101 | 2881.88 | 2913.0 | -0.9 | -0.8 | 23.6 | 2912.4 | 0.6 |
| 188 | 0100 0100 | 2897.50 | 2935.9 | -0.9 | -0.9 | 22.9 | 2928.2 | 7.7 |
| 189 | 0100 0011 | 2913.13 | 2938.8 | 0.8 | 0.8 | 2.9 | 2944.1 | -5.3 |
| 190 | 0100 0010 | 2928.75 | 2957.1 | 0.9 | 0.9 | 18.4 | 2959.9 | -2.8 |
| 191 | 0100 0001 | 2944.38 | 2978.5 | -0.9 | 0.0 | 21.3 | 2975.8 | 2.7 |
| 192 | 0100 0000 | 2960.00 | 2995.1 | -1.1 | -1.0 | 16.6 | 2991.6 | 3.7 |
| 193 | 0011 1111 | 2975.63 | 3000.2 | 0.0 | -0.9 | 5.1 | 3007.5 | -7.3 |
| 194 | 0011 1110 | 2991.25 | 3013.8 | 0.9 | 0.9 | 13.6 | 3023.3 | -9.5 |
| 195 | 0011 1101 | 3006.88 | 3039.0 | 0.9 | 0.8 | 25.2 | 3039.2 | -0.2 |
| 196 | 0011 1100 | 3022.50 | 3055.5 | -1.0 | -0.9 | 16.5 | 3055.0 | 0.5 |
| 197 | 0011 1011 | 3038.13 | 3067.0 | -0.9 | -0.8 | 11.5 | 3070.9 | -3.8 |
| 198 | 0011 1010 | 3053.75 | 3082.4 | 0.9 | -0.1 | 15.4 | 3086.7 | -4.3 |
| 199 | 0011 1001 | 3069.38 | 3104.9 | 0.8 | 0.8 | 22.5 | 3102.6 | 2.3 |
| 200 | 0011 1000 | 3085.00 | 3108.9 | -0.0 | 1.0 | 4.0 | 3118.4 | -9.5 |
| 201 | 0011 0111 | 3100.63 | 3127.6 | -0.9 | -0.9 | 18.7 | 3134.3 | -6.7 |
| 202 | 0011 0110 | 3116.25 | 3143.8 | -1.0 | -0.9 | 16.2 | 3150.1 | -6.4 |
| 203 | 0011 0101 | 3131.88 | 3166.2 | 0.8 | 0.8 | 22.4 | 3166.0 | 0.2 |
| 204 | 0011 0100 | 3147.50 | 3184.2 | 0.9 | 1.0 | 18.0 | 3181.8 | 2.4 |
| 205 | 0011 0011 | 3163.13 | 3193.6 | -0.8 | 0.0 | 9.4 | 3197.7 | -4.1 |
| 206 | 0011 0010 | 3178.75 | 3211.8 | -1.0 | -1.0 | 18.1 | 3213.5 | -1.8 |
| 207 | 0011 0001 | 3194.38 | 3233.0 | -0.0 | -0.9 | 21.2 | 3229.4 | 3.6 |
| 208 | 0011 0000 | 3210.00 | 3246.4 | -6.1 | 1.0 | 13.4 | 3245.2 | 1.1 |
| 209 | 0010 1111 | 3225.63 | 3253.1 | 0.9 | 0.9 | 6.7 | 3261.1 | -8.0 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 79
 1981/12/02 08:22:13 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.5-B A/D THRESHOLD TEST (RANGE = 4, SENSOR = 1)



DE 02 28

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|----------------------------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO= 1:1
LOWER | UPPER | | POINT | DEVIATION |
| 210 | 0010 1110 | 3241.25 | 3268.9 | -0.9 | -1.0 | 15.8 | 3276.9 | -8.1 |
| 211 | 0010 1101 | 3256.88 | 3296.6 | -1.0 | -0.8 | 27.7 | 3292.8 | 3.8 |
| 212 | 0010 1100 | 3272.50 | 3311.5 | -5.4 | 0.2 | 14.9 | 3308.6 | 2.8 |
| 213 | 0010 1011 | 3288.13 | 3320.2 | 0.9 | 0.9 | 8.7 | 3324.5 | -4.3 |
| 214 | 0010 1010 | 3303.75 | 3337.2 | -0.1 | 0.9 | 17.0 | 3340.3 | -3.2 |
| 215 | 0010 1001 | 3319.38 | 3360.1 | -1.0 | -0.9 | 23.0 | 3356.2 | 3.9 |
| 216 | 0010 1000 | 3335.00 | 3368.7 | -1.0 | -1.0 | 8.6 | 3372.1 | -3.3 |
| 217 | 0010 0111 | 3350.63 | 3380.9 | 0.9 | 0.9 | 12.2 | 3387.9 | -7.0 |
| 218 | 0010 0110 | 3366.25 | 3397.5 | 0.8 | 0.9 | 16.6 | 3403.8 | -6.2 |
| 219 | 0010 0101 | 3381.88 | 3421.7 | -0.9 | 2.5 | 24.1 | 3419.6 | 2.1 |
| 220 | 0010 0100 | 3397.50 | 3443.5 | -1.1 | -1.0 | 21.8 | 3435.5 | 8.1 |
| 221 | 0010 0011 | 3413.13 | 3448.2 | 0.1 | -0.8 | 4.7 | 3451.3 | -3.1 |
| 222 | 0010 0010 | 3428.75 | 3465.8 | 0.8 | 1.0 | 17.6 | 3467.2 | -1.4 |
| 223 | 0010 0001 | 3444.38 | 3486.9 | 0.8 | -0.9 | 21.1 | 3483.0 | 3.1 |
| 224 | 0010 0000 | 3460.00 | 3494.3 | -1.0 | -1.0 | 7.3 | 3498.9 | -4.6 |
| 225 | 0001 1111 | 3475.63 | 3509.5 | -1.0 | -0.9 | 15.2 | 3514.7 | -5.2 |
| 226 | 0001 1110 | 3491.25 | 3523.0 | 0.9 | 0.1 | 13.5 | 3530.6 | -7.1 |
| 227 | 0001 1101 | 3506.88 | 3551.5 | 0.7 | 0.9 | 28.4 | 3546.4 | 5.1 |
| 228 | 0001 1100 | 3522.50 | 3564.7 | -6.8 | 1.1 | 13.3 | 3562.3 | 2.5 |
| 229 | 0001 1011 | 3538.13 | 3576.8 | -0.9 | -0.9 | 12.0 | 3578.1 | -1.4 |
| 230 | 0001 1010 | 3553.75 | 3593.1 | -0.9 | -0.9 | 16.3 | 3594.0 | -0.9 |
| 231 | 0001 1001 | 3569.38 | 3615.3 | 0.8 | 0.9 | 22.2 | 3609.8 | 5.5 |
| 232 | 0001 1000 | 3585.00 | 3621.4 | 1.0 | 1.0 | 6.0 | 3625.7 | -4.3 |
| 233 | 0001 0111 | 3600.63 | 3638.0 | -1.1 | 0.0 | 16.6 | 3641.5 | -3.6 |
| 234 | 0001 0110 | 3616.25 | 3654.2 | -1.0 | -0.9 | 16.2 | 3657.4 | -3.2 |
| 235 | 0001 0101 | 3631.88 | 3678.0 | -0.1 | -0.8 | 23.8 | 3673.2 | 4.8 |
| 236 | 0001 0100 | 3647.50 | 3696.9 | 0.8 | 0.7 | 18.8 | 3689.1 | 7.8 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODFI.. FLT. S/N PAGE 80
 1981/12/02 08:22:13 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.0.5-R A/D THRESHOLD TEST (BAND)= 4. HENSON=1

HAC
 TEST
 527

DC 02 81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 237 | 0001 0011 | 3663.13 | 3704.5 | 0.5 | 0.5 | 7.6 | 3704.9 | -0.5 |
| 238 | 0001 0010 | 3678.75 | 3722.7 | -1.0 | -0.9 | 18.2 | 3720.8 | 1.9 |
| 239 | 0001 0001 | 3694.38 | 3744.6 | -1.0 | -0.9 | 21.9 | 3736.6 | 7.9 |
| 240 | 0001 0000 | 3710.00 | 3761.5 | 0.9 | 0.0 | 16.9 | 3752.5 | 9.0 |
| 241 | 0000 1111 | 3725.63 | 3764.7 | 0.9 | 0.9 | 3.2 | 3768.3 | -3.6 |
| 242 | 0000 1110 | 3741.25 | 3779.4 | -0.1 | 0.9 | 14.7 | 3784.2 | -4.8 |
| 243 | 0000 1101 | 3756.88 | 3808.5 | -1.0 | -0.9 | 29.1 | 3800.0 | 8.5 |
| 244 | 0000 1100 | 3772.50 | 3823.1 | -1.0 | -0.9 | 14.6 | 3815.9 | 7.2 |
| 245 | 0000 1011 | 3788.13 | 3832.2 | 0.9 | 1.0 | 9.0 | 3831.7 | 0.4 |
| 246 | 0000 1010 | 3803.75 | 3849.3 | 0.8 | 1.0 | 17.1 | 3847.6 | 1.7 |
| 247 | 0000 1001 | 3819.38 | 3872.8 | -1.2 | -0.1 | 23.5 | 3863.4 | 9.3 |
| 248 | 0000 1000 | 3835.00 | 3885.0 | -0.9 | -0.8 | 12.2 | 3879.3 | 5.7 |
| 249 | 0000 0111 | 3850.63 | 3894.5 | -0.1 | -0.9 | 9.5 | 3890.2 | -0.6 |
| 250 | 0000 0110 | 3866.25 | 3910.1 | 0.8 | 1.0 | 15.6 | 3911.0 | -0.9 |
| 251 | 0000 0101 | 3881.88 | 3936.2 | 0.4 | 0.4 | 26.1 | 3926.9 | 9.4 |
| 252 | 0000 0100 | 3897.50 | 3957.6 | -1.1 | -0.9 | 21.3 | 3942.7 | 14.9 |
| 253 | 0000 0011 | 3913.13 | 3962.3 | -1.0 | -0.8 | 4.7 | 3958.6 | 3.7 |
| 254 | 0000 0010 | 3928.75 | 3979.0 | 0.8 | -0.0 | 16.7 | 3974.4 | 4.6 |
| 255 | 0000 0001 | 3944.38 | 4000.7 | 0.2 | 0.9 | 21.7 | 3990.3 | 10.5 |

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HS-236 THERMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/W PAGE 81
 1981/12/02 08:28:38 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.5-8 A/D THRESHOLD TEST (BAND= 5, SENSOR=1)
 S U M M A R Y

IIAG
TEST
527

000201

CHECK 1) RMS ERROR, 2) THRESHOLD INCREMENT(+/- 0.0 := THRH INC < 31.2)
 THE REMAINING DATA ARE FOR INFORMATION ONLY

BEST FIT STRAIGHT LINE IS: $Y = 15.882X - 41.9MV$

DEVIATION OF SLOPE FROM IDEAL IS: 1.646%
 OFFSET IS: -41.9MV
 COEFFICIENT OF DETERMINATION IS: $R^2 = .99999160$
 ANALOG INPUT DURING DC RESTORE IS: 63.9MV

RMS ERROR = 3.773MV REQMT: RMS ERROR < 7.812MV

THRESHOLD INCREMENT MEASUREMENT

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|--|-------------|----------|---------|-------------|--------------------|
| 26.8MV | 158 | 15.929MV | 2.2MV | 241 | 4.765MV |
| LOWER LIMIT AT OUTPUT LEVELS RATIO = 1 ± 1 | | | | | |
| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
| 1.9MV | 204 | -0.099MV | -4.6MV | 112 | 1.524MV |
| UPPER LIMIT AT OUTPUT LEVELS RATIO = 1 ± 1 | | | | | |
| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
| 5.8MV | 140 | 0.000MV | -2.1MV | 128 | 1.558MV |

TEST PASSED

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 83
 1981/12/02 08:20:51 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3+3+3+3+3+3 A/D THRESHOLD TEST CHANNEL 1.0 1.0 1.0 1.0 1.0 1.0



01 02 '81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|---------|-------|------------------------------------|------------------------|-------|
| | | | LEVELS RATIO= | NOMINAL | LOWER | | UPPER | POINT |
| 26 | 1110 0110 | 366.250 | 373.9 | -0.1 | -1.6 | 21.6 | 371.0 | 2.9 |
| 27 | 1110 0101 | 381.875 | 387.3 | 1.6 | 1.6 | 13.3 | 386.9 | 0.4 |
| 28 | 1110 0100 | 397.500 | 407.7 | -0.0 | 1.7 | 20.4 | 402.8 | 4.9 |
| 29 | 1110 0011 | 413.125 | 418.4 | -1.6 | -1.5 | 10.7 | 418.7 | -0.2 |
| 30 | 1110 0010 | 428.750 | 442.0 | 0.3 | 0.4 | 23.6 | 434.5 | 7.5 |
| 31 | 1110 0001 | 444.375 | 453.4 | 1.6 | 0.0 | 11.4 | 450.4 | 3.0 |
| 32 | 1110 0000 | 460.000 | 464.9 | 1.2 | 1.2 | 11.4 | 466.3 | -1.4 |
| 33 | 1101 1111 | 475.625 | 477.3 | -0.0 | 1.5 | 12.4 | 482.2 | -4.9 |
| 34 | 1101 1110 | 491.250 | 500.0 | -1.7 | -1.7 | 22.7 | 498.1 | 1.9 |
| 35 | 1101 1101 | 506.875 | 515.2 | -0.0 | -1.4 | 15.2 | 514.0 | 1.2 |
| 36 | 1101 1100 | 522.500 | 526.9 | 1.7 | 1.8 | 11.7 | 529.8 | -3.0 |
| 37 | 1101 1011 | 538.125 | 543.4 | 1.5 | 1.5 | 16.5 | 545.7 | -2.3 |
| 38 | 1101 1010 | 553.750 | 566.1 | -1.7 | 0.1 | 22.7 | 561.6 | 4.5 |
| 39 | 1101 1001 | 569.375 | 581.5 | -1.6 | -1.6 | 15.3 | 577.5 | 4.0 |
| 40 | 1101 1000 | 585.000 | 595.9 | -0.0 | -1.6 | 14.4 | 593.4 | 2.5 |
| 41 | 1101 0111 | 600.625 | 604.9 | 1.5 | 1.6 | 9.0 | 609.2 | -4.4 |
| 42 | 1101 0110 | 616.250 | 625.4 | -0.0 | 1.7 | 20.5 | 625.1 | 0.3 |
| 43 | 1101 0101 | 631.875 | 642.8 | -1.5 | -1.5 | 17.4 | 641.0 | 1.8 |
| 44 | 1101 0100 | 647.500 | 659.1 | -1.7 | -1.7 | 16.3 | 656.9 | 2.2 |
| 45 | 1101 0011 | 663.125 | 670.7 | 1.6 | 0.0 | 11.6 | 672.8 | -2.1 |
| 46 | 1101 0010 | 678.750 | 696.2 | 1.6 | 1.8 | 25.5 | 688.7 | 7.6 |
| 47 | 1101 0001 | 694.375 | 707.1 | -0.0 | 1.6 | 10.8 | 704.5 | 2.5 |
| 48 | 1101 0000 | 710.000 | 725.5 | -1.3 | -1.2 | 18.4 | 720.4 | 5.0 |
| 49 | 1100 1111 | 725.625 | 733.5 | 0.0 | -1.5 | 8.1 | 736.3 | -2.8 |
| 50 | 1100 1110 | 741.250 | 753.5 | -1.6 | 1.7 | 19.9 | 752.2 | 1.3 |
| 51 | 1100 1101 | 756.875 | 768.3 | 1.5 | 1.5 | 14.8 | 768.1 | 0.2 |

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HS-206 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 84
 1981/12/02 08:20:53 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.5-3 A/D THRESHOLD TEST (HAND= 5.0 REPAIR=)

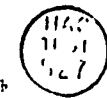


DEC 02 81

| THRESHOLD A/D OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|------------------------|---------------------------|----------------------------|-------|------------------------------------|------------------------|-------------|
| | | NOMINAL | LEVELS RATIO= 1:1
LOWER | UPPER | | POINT | DEVIATION |
| 52 | 1100 1100 | 772.500 | 785.6 | -1.8 | 0.0 | 17.3 | 784.0 1.6 |
| 53 | 1100 1011 | 780.125 | 799.3 | -1.6 | -1.6 | 13.7 | 799.8 -0.6 |
| 54 | 1100 1010 | 803.750 | 821.6 | -0.0 | -1.7 | 22.3 | 815.7 1.9 |
| 55 | 1100 1001 | 819.375 | 833.9 | 1.6 | 1.5 | 12.3 | 831.6 2.3 |
| 56 | 1100 1000 | 835.000 | 852.0 | -0.0 | 1.7 | 18.0 | 847.5 1.5 |
| 57 | 1100 0111 | 850.625 | 860.4 | -1.6 | -1.5 | 8.4 | 863.4 -3.0 |
| 58 | 1100 0110 | 866.250 | 881.1 | -1.7 | -1.6 | 20.7 | 879.2 1.9 |
| 59 | 1100 0101 | 881.875 | 895.0 | 1.6 | 0.0 | 13.8 | 895.1 -0.2 |
| 60 | 1100 0100 | 897.500 | 915.2 | 1.7 | 1.7 | 20.2 | 911.0 4.1 |
| 61 | 1100 0011 | 913.125 | 924.3 | 0.0 | 1.6 | 9.1 | 926.9 -2.6 |
| 62 | 1100 0010 | 928.750 | 948.6 | 0.1 | 0.1 | 24.3 | 942.8 5.8 |
| 63 | 1100 0001 | 944.375 | 962.0 | 0.0 | -1.6 | 13.4 | 958.7 3.4 |
| 64 | 1100 0000 | 960.000 | 977.0 | 1.9 | 1.9 | 14.9 | 974.5 2.4 |
| | | | | | | | |
| 65 | 1011 1111 | 975.625 | 988.1 | 1.6 | 1.6 | 11.2 | 990.4 -2.3 |
| 66 | 1011 1110 | 991.250 | 1007.1 | -0.3 | -0.0 | 19.0 | 1006.3 0.8 |
| 67 | 1011 1101 | 1006.88 | 1025.8 | -1.5 | -1.4 | 18.7 | 1022.2 3.7 |
| 68 | 1011 1100 | 1022.50 | 1038.9 | -0.1 | -1.8 | 13.0 | 1038.1 0.8 |
| 69 | 1011 1011 | 1038.13 | 1053.7 | 1.5 | 1.5 | 14.9 | 1054.0 -0.2 |
| 70 | 1011 1010 | 1054.75 | 1073.4 | -0.1 | 1.7 | 19.6 | 1069.8 3.6 |
| 71 | 1011 1001 | 1069.38 | 1091.4 | -1.6 | -1.5 | 18.0 | 1085.7 5.7 |
| 72 | 1011 1000 | 1085.00 | 1102.2 | -1.7 | -1.7 | 10.7 | 1101.6 0.6 |
| 73 | 1011 0111 | 1100.63 | 1114.8 | 1.5 | -0.0 | 12.6 | 1112.5 -2.7 |
| 74 | 1011 0110 | 1116.25 | 1134.8 | 1.6 | 1.6 | 20.0 | 1131.4 1.1 |
| 75 | 1011 0101 | 1131.88 | 1150.8 | 0.0 | 1.5 | 15.9 | 1149.2 1.5 |
| 76 | 1011 0100 | 1147.50 | 1166.8 | -1.8 | -1.8 | 16.0 | 1165.1 1.6 |
| 77 | 1011 0011 | 1163.13 | 1181.7 | 0.0 | -1.5 | 14.9 | 1181.0 0.7 |
| 78 | 1011 0010 | 1178.75 | 1203.2 | 1.7 | 1.7 | 21.5 | 1196.9 6.3 |

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S-236 THEMATIC MAPPER MUX UNIT TEST MODEL: FLT. S/N PAGE 85
 98112/07 08:28:51 FINALITY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 .5.3.5-4 A/D THRESHOLD TEST (BAND= 5% 14-15-16-17)



DL 02 M

| RESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|-------------------|-------------------------|------------------------|---------------------------|-----------------------------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO= 1.11
LOWER | UPPER | | POINT | DEVIATION |
| 79 | 1011 0001 | 1194.38 | 1216.2 | 1.5 | 1.5 | 12.9 | 1212.8 | 3.4 |
| 80 | 1011 0000 | 1210.00 | 1231.1 | -1.7 | -0.1 | 15.0 | 1228.7 | 2.5 |
| 81 | 1010 1111 | 1225.63 | 1242.6 | -1.6 | -1.5 | 11.4 | 1244.5 | -2.0 |
| 82 | 1010 1110 | 1241.25 | 1262.8 | -2.3 | -0.4 | 20.2 | 1260.4 | 2.4 |
| 83 | 1010 1101 | 1256.88 | 1277.0 | 1.6 | 1.6 | 14.2 | 1276.3 | 0.7 |
| 84 | 1010 1100 | 1272.50 | 1293.8 | -2.3 | -0.5 | 16.7 | 1292.2 | 1.0 |
| 85 | 1010 1011 | 1288.13 | 1307.9 | -1.6 | -1.6 | 14.1 | 1308.1 | -0.2 |
| 86 | 1010 1010 | 1303.75 | 1329.1 | -1.7 | -1.7 | 21.1 | 1321.9 | 5.1 |
| 87 | 1010 1001 | 1319.38 | 1342.4 | 1.6 | 0.0 | 13.3 | 1339.8 | 2.5 |
| 88 | 1010 1000 | 1335.00 | 1356.9 | 1.6 | 1.7 | 14.5 | 1355.7 | 1.1 |
| 89 | 1010 0111 | 1350.63 | 1367.2 | -0.0 | 1.5 | 10.4 | 1371.6 | -4.4 |
| 90 | 1010 0110 | 1366.25 | 1389.1 | -1.7 | -1.7 | 21.9 | 1387.5 | 1.6 |
| 91 | 1010 0101 | 1381.88 | 1404.7 | 0.1 | -1.5 | 15.6 | 1403.4 | 1.3 |
| 92 | 1010 0100 | 1397.50 | 1421.1 | 1.4 | 1.8 | 16.4 | 1419.2 | 1.9 |
| 93 | 1010 0011 | 1413.13 | 1432.5 | 1.6 | 1.6 | 11.3 | 1431.1 | -2.7 |
| 94 | 1010 0010 | 1428.75 | 1455.8 | 0.7 | 0.0 | 23.4 | 1451.0 | 4.8 |
| 95 | 1010 0001 | 1444.38 | 1470.1 | -1.6 | -1.5 | 14.2 | 1466.9 | 3.2 |
| 96 | 1010 0000 | 1460.00 | 1484.9 | 0.0 | -1.2 | 14.8 | 1482.8 | 2.1 |
| 97 | 1001 1111 | 1475.63 | 1492.3 | 1.6 | 1.5 | 7.5 | 1498.7 | -6.3 |
| 98 | 1001 1110 | 1491.25 | 1512.4 | -2.1 | -0.2 | 20.0 | 1514.5 | -2.1 |
| 99 | 1001 1101 | 1506.88 | 1529.7 | -1.7 | -1.7 | 17.3 | 1530.4 | -0.7 |
| 100 | 1001 1100 | 1522.50 | 1541.6 | -0.6 | -1.8 | 11.9 | 1546.3 | -4.7 |
| 101 | 1001 1011 | 1538.13 | 1557.7 | 1.7 | 0.0 | 16.1 | 1562.2 | -4.5 |
| 102 | 1001 1010 | 1553.75 | 1576.6 | 1.9 | 1.8 | 18.9 | 1578.1 | -1.5 |
| 103 | 1001 1001 | 1569.38 | 1593.6 | 0.0 | 1.6 | 17.0 | 1593.9 | 0.3 |
| 104 | 1001 1000 | 1585.00 | 1608.7 | -1.8 | -1.8 | 15.1 | 1609.8 | -1.1 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 86
 1981/12/02 08:28:51 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH RUN
 3.5.4.15-11 AND THRESHOLD TEST (CANDIDATE) 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0



| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1620.7 | 0.1 | -1.6 | 11.5 | 1620.7 | -1.5 |
| 106 | 1001 0110 | 1616.25 | 1637.9 | 1.8 | 1.8 | 17.7 | 1641.6 | -3.7 |
| 107 | 1001 0101 | 1631.88 | 1654.5 | 1.6 | 1.6 | 16.5 | 1657.5 | -3.0 |
| 108 | 1001 0100 | 1647.50 | 1670.3 | -1.8 | 0.0 | 15.9 | 1673.4 | -3.0 |
| 109 | 1001 0011 | 1663.13 | 1685.5 | -1.7 | -1.6 | 15.1 | 1689.2 | -3.8 |
| 110 | 1001 0010 | 1678.75 | 1708.0 | 0.0 | -1.8 | 22.5 | 1705.1 | 2.9 |
| 111 | 1001 0001 | 1694.38 | 1719.8 | 1.7 | 1.6 | 11.8 | 1721.0 | -1.2 |
| 112 | 1001 0000 | 1710.00 | 1739.5 | -4.6 | 1.4 | 19.7 | 1736.9 | 2.6 |
| 113 | 1000 1111 | 1725.63 | 1746.3 | -1.5 | -1.6 | 6.8 | 1752.8 | -6.5 |
| 114 | 1000 1110 | 1741.25 | 1767.2 | -1.8 | -1.8 | 20.9 | 1768.6 | -1.4 |
| 115 | 1000 1101 | 1756.88 | 1780.2 | 1.8 | 0.0 | 13.0 | 1784.5 | -4.3 |
| 116 | 1000 1100 | 1772.50 | 1794.6 | 1.8 | 1.8 | 14.4 | 1800.4 | -5.8 |
| 117 | 1000 1011 | 1788.13 | 1809.9 | -0.0 | 1.6 | 15.3 | 1816.3 | -6.3 |
| 118 | 1000 1010 | 1803.75 | 1832.2 | -1.9 | -1.8 | 22.2 | 1832.2 | 0.0 |
| 119 | 1000 1001 | 1819.38 | 1847.5 | 0.0 | -1.6 | 15.3 | 1848.1 | -0.5 |
| 120 | 1000 1000 | 1835.00 | 1863.6 | 1.8 | 1.7 | 16.0 | 1861.9 | -0.4 |
| 121 | 1000 0111 | 1850.63 | 1870.7 | 1.7 | 1.7 | 7.1 | 1879.8 | -9.1 |
| 122 | 1000 0110 | 1866.25 | 1892.1 | -1.8 | -0.0 | 21.4 | 1895.7 | -3.6 |
| 123 | 1000 0101 | 1881.88 | 1908.3 | -1.6 | -1.6 | 16.2 | 1911.6 | -3.3 |
| 124 | 1000 0100 | 1897.50 | 1928.2 | 0.0 | -1.9 | 19.9 | 1927.5 | 0.8 |
| 125 | 1000 0011 | 1913.13 | 1935.8 | 1.7 | 1.7 | 7.6 | 1943.4 | -7.5 |
| 126 | 1000 0010 | 1928.75 | 1959.3 | -2.5 | -0.7 | 23.4 | 1959.2 | 0.0 |
| 127 | 1000 0001 | 1944.38 | 1973.6 | -1.7 | -1.7 | 14.3 | 1975.1 | -1.6 |
| 128 | 1000 0000 | 1960.00 | 1997.9 | -2.1 | -2.1 | 24.3 | 1991.0 | 6.9 |
| 129 | 0111 1111 | 1975.63 | 2003.6 | 1.6 | 0.0 | 5.8 | 2006.9 | -3.2 |
| 130 | 0111 1110 | 1991.25 | 2022.1 | 1.7 | 1.7 | 18.5 | 2022.8 | -0.6 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 87
 1981/12/02 08:28:51 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.3-4 A/D THRESHOLD TEST (BAND= 5% SIGNIFICANT) UC 02 M

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | DIGITAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|--------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 131 | 0111 1101 | 2006.88 | 2039.6 | 0.0 | 1.7 | 17.4 | 2038.6 | 0.9 |
| 132 | 0111 1100 | 2022.50 | 2058.0 | -2.0 | -2.1 | 18.4 | 2054.5 | 3.5 |
| 133 | 0111 1011 | 2038.13 | 2070.7 | 0.0 | -1.6 | 12.6 | 2070.4 | 0.3 |
| 134 | 0111 1010 | 2053.75 | 2090.1 | 1.7 | 1.8 | 19.4 | 2086.3 | 3.8 |
| 135 | 0111 1001 | 2069.38 | 2105.1 | 1.7 | 1.7 | 15.0 | 2102.2 | 2.9 |
| 136 | 0111 1000 | 2085.00 | 2118.1 | -1.7 | 0.0 | 13.0 | 2118.1 | 0.0 |
| 137 | 0111 0111 | 2100.63 | 2131.8 | -1.7 | -1.6 | 13.7 | 2133.9 | -2.2 |
| 138 | 0111 0110 | 2116.25 | 2152.9 | 0.1 | -1.7 | 21.1 | 2149.8 | 3.1 |
| 139 | 0111 0101 | 2131.88 | 2166.0 | 1.7 | 1.7 | 13.1 | 2165.7 | 0.2 |
| 140 | 0111 0100 | 2147.50 | 2183.5 | -2.1 | 5.8 | 17.6 | 2181.6 | 2.0 |
| 141 | 0111 0011 | 2163.13 | 2197.0 | -1.8 | -1.7 | 13.5 | 2197.5 | -0.4 |
| 142 | 0111 0010 | 2178.75 | 2222.6 | -1.8 | -1.8 | 25.5 | 2213.3 | 9.2 |
| 143 | 0111 0001 | 2194.38 | 2231.4 | 1.7 | 0.0 | 8.8 | 2229.2 | 2.2 |
| 144 | 0111 0000 | 2210.00 | 2241.7 | 1.3 | 1.3 | 10.3 | 2245.1 | -3.4 |
| 145 | 0110 1111 | 2225.63 | 2256.3 | 0.1 | 1.7 | 14.5 | 2261.0 | -4.7 |
| 146 | 0110 1110 | 2241.25 | 2277.5 | -1.8 | -1.8 | 21.2 | 2276.9 | 0.6 |
| 147 | 0110 1101 | 2256.88 | 2293.9 | 0.0 | -1.7 | 16.4 | 2292.8 | 1.1 |
| 148 | 0110 1100 | 2272.50 | 2311.6 | -1.2 | -1.2 | 17.7 | 2308.6 | 3.0 |
| 149 | 0110 1011 | 2288.13 | 2321.7 | 1.6 | 1.6 | 10.0 | 2324.5 | -2.8 |
| 150 | 0110 1010 | 2303.75 | 2345.8 | -1.8 | 0.0 | 24.1 | 2340.4 | 5.3 |
| 151 | 0110 1001 | 2319.38 | 2359.4 | -1.8 | -1.7 | 13.6 | 2356.3 | 3.1 |
| 152 | 0110 1000 | 2335.00 | 2374.0 | 0.0 | -1.8 | 14.6 | 2372.2 | 1.8 |
| 153 | 0110 0111 | 2350.63 | 2382.6 | 1.7 | 1.6 | 8.6 | 2388.1 | -5.5 |
| 154 | 0110 0110 | 2366.25 | 2403.8 | -0.1 | 1.7 | 21.2 | 2403.9 | -0.1 |
| 155 | 0110 0101 | 2381.88 | 2420.2 | -1.7 | -1.7 | 16.3 | 2419.8 | 0.4 |
| 156 | 0110 0100 | 2397.50 | 2439.6 | 0.5 | 0.5 | 19.4 | 2435.7 | 3.9 |
| 157 | 0110 0011 | 2413.13 | 2447.7 | 1.7 | 0.0 | 8.1 | 2441.6 | -3.9 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 89
 1981/12/02 08:28:51 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HICH BUS
 3.5-3.5-4 A/D THRESHOLD TEST (BAND= 1.0 1.0-2.0-3.0-4.0)



DEC 02 81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDFAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 184 | 0100 1000 | 2835.00 | 2882.5 | -1.9 | -2.1 | 18.8 | 2880.4 | 2.1 |
| 185 | 0100 0111 | 2850.63 | 2887.0 | 1.8 | 0.0 | 4.4 | 2896.3 | -9.3 |
| 186 | 0100 0110 | 2866.25 | 2907.6 | 1.8 | 1.9 | 20.7 | 2912.2 | -4.5 |
| 187 | 0100 0101 | 2881.88 | 2922.9 | -0.0 | 1.8 | 15.3 | 2928.0 | -0.1 |
| 188 | 0100 0100 | 2897.50 | 2947.5 | -1.9 | -1.9 | 24.6 | 2943.9 | 3.6 |
| 189 | 0100 0011 | 2913.13 | 2954.0 | 0.0 | -1.7 | 6.4 | 2959.8 | -0.8 |
| 190 | 0100 0010 | 2928.75 | 2978.4 | 1.8 | 1.9 | 24.4 | 2975.7 | 2.7 |
| 191 | 0100 0001 | 2944.38 | 2988.4 | 1.8 | 1.8 | 10.0 | 2991.6 | -3.2 |
| 192 | 0100 0000 | 2960.00 | 3012.0 | -2.2 | -0.0 | 23.6 | 3007.5 | 4.5 |
| 193 | 0011 1111 | 2975.63 | 3018.2 | -1.7 | -1.7 | 6.2 | 3023.3 | -0.1 |
| 194 | 0011 1110 | 2991.25 | 3035.8 | -0.1 | -1.9 | 17.5 | 3039.2 | -3.5 |
| 195 | 0011 1101 | 3006.88 | 3052.0 | 1.8 | 1.8 | 16.3 | 3056.1 | -3.1 |
| 196 | 0011 1100 | 3022.50 | 3069.6 | -1.6 | 0.4 | 17.5 | 3071.0 | -1.4 |
| 197 | 0011 1011 | 3038.13 | 3084.1 | -1.8 | -1.8 | 14.5 | 3086.9 | -2.8 |
| 198 | 0011 1010 | 3053.75 | 3104.1 | -1.1 | -1.9 | 20.0 | 3102.8 | 1.3 |
| 199 | 0011 1001 | 3069.38 | 3118.5 | 1.7 | 0.0 | 14.4 | 3118.6 | -0.1 |
| 200 | 0011 1000 | 3085.00 | 3129.4 | 1.8 | 1.9 | 10.9 | 3134.5 | -5.1 |
| 201 | 0011 0111 | 3100.63 | 3145.4 | -1.8 | -0.0 | 16.0 | 3150.4 | -5.0 |
| 202 | 0011 0110 | 3116.25 | 3166.4 | -1.8 | -1.8 | 20.9 | 3166.3 | 0.1 |
| 203 | 0011 0101 | 3131.88 | 3181.5 | -0.0 | -1.8 | 15.2 | 3182.2 | -0.6 |
| 204 | 0011 0100 | 3147.50 | 3193.9 | 1.9 | 2.0 | 12.3 | 3198.0 | -4.2 |
| 205 | 0011 0011 | 3163.13 | 3209.4 | 1.7 | 1.8 | 15.5 | 3214.9 | -4.5 |
| 206 | 0011 0010 | 3178.75 | 3235.8 | -2.0 | 0.0 | 26.4 | 3229.8 | 6.0 |
| 207 | 0011 0001 | 3194.38 | 3247.5 | -1.8 | -1.8 | 11.7 | 3245.7 | 1.8 |
| 208 | 0011 0000 | 3210.00 | 3264.4 | 1.5 | 0.1 | 16.9 | 3261.6 | 2.8 |
| 209 | 0010 1111 | 3225.63 | 3271.1 | 1.7 | 1.7 | 6.7 | 3277.5 | -6.4 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 90
 1981/12/02 08:28:51 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.5-H A/D THRESHOLD TEST (EAND)= 0, SE NSDN=1

HAC
 T031
 S27

DEC 02 '81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO= 1 : 1
NOMINAL LOWER UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT DEVIATION |
|---------------------|-------------------------|------------------------|---|------------------------------------|---|
| 210 | 0010 1110 | 3241.25 | 3289.3 -0.1 1.8 | 18.2 | 3293.3 -4.0 |
| 211 | 0010 1101 | 3256.88 | 3308.2 -1.8 -1.8 | 18.9 | 3309.2 -1.0 |
| 212 | 0010 1100 | 3272.50 | 3324.4 1.1 1.3 | 16.2 | 3325.1 -0.7 |
| 213 | 0010 1011 | 3288.13 | 3337.0 1.6 -0.0 | 12.6 | 3341.0 -4.0 |
| 214 | 0010 1010 | 3303.75 | 3358.2 1.8 2.0 | 21.2 | 3366.9 1.4 |
| 215 | 0010 1001 | 3319.38 | 3375.1 -1.9 0.0 | 16.9 | 3372.7 2.4 |
| 216 | 0010 1000 | 3335.00 | 3390.2 -1.8 -1.8 | 15.0 | 3388.6 1.5 |
| 217 | 0010 0111 | 3350.63 | 3400.4 -0.0 -1.7 | 10.2 | 3404.5 -4.1 |
| 218 | 0010 0110 | 3366.25 | 3419.5 1.7 1.8 | 19.1 | 3420.4 -0.9 |
| 219 | 0010 0101 | 3381.88 | 3434.7 1.7 1.9 | 15.2 | 3436.3 -1.6 |
| 220 | 0010 0100 | 3397.50 | 3457.8 -2.1 -0.0 | 23.1 | 3452.2 5.7 |
| 221 | 0010 0011 | 3413.13 | 3466.3 -1.8 -1.8 | 8.4 | 3468.0 -1.8 |
| 222 | 0010 0010 | 3428.75 | 3490.3 1.8 0.0 | 24.0 | 3484.9 6.4 |
| 223 | 0010 0001 | 3444.38 | 3501.0 1.8 1.8 | 10.7 | 3499.8 1.2 |
| 224 | 0010 0000 | 3460.00 | 3518.5 -0.1 1.4 | 17.5 | 3515.7 2.8 |
| 225 | 0001 1111 | 3475.63 | 3527.3 -1.8 -1.8 | 8.8 | 3531.6 -4.2 |
| 226 | 0001 1110 | 3491.25 | 3544.2 -2.1 -1.9 | 16.9 | 3547.5 -3.2 |
| 227 | 0001 1101 | 3506.88 | 3560.7 1.8 0.1 | 16.5 | 3563.3 -2.6 |
| 228 | 0001 1100 | 3522.50 | 3578.7 1.3 1.3 | 17.9 | 3579.2 -0.5 |
| 229 | 0001 1011 | 3538.13 | 3593.6 -1.9 0.0 | 14.9 | 3595.1 -1.5 |
| 230 | 0001 1010 | 3553.75 | 3613.1 -2.1 -2.0 | 19.5 | 3611.0 2.1 |
| 231 | 0001 1001 | 3569.38 | 3630.1 -0.1 -1.8 | 17.0 | 3626.9 3.2 |
| 232 | 0001 1000 | 3585.00 | 3641.8 1.9 2.0 | 11.7 | 3642.7 -1.0 |
| 233 | 0001 0111 | 3600.63 | 3653.8 1.8 1.8 | 12.0 | 3658.6 -4.9 |
| 234 | 0001 0110 | 3616.25 | 3675.9 -2.1 0.0 | 22.2 | 3674.5 1.4 |
| 235 | 0001 0101 | 3631.88 | 3691.5 -1.9 -1.7 | 15.6 | 3690.4 1.1 |
| 236 | 0001 0100 | 3647.50 | 3707.1 -1.1 0.0 | 15.5 | 3706.3 0.8 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODFL.. FLT. S/N PAGE 91

1981/12/02 08:28:51 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS

3.5.3.5-4 A/D THRESHOLD TEST (RAND= 1.0 SENSIT= 1



Mr 02 81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|------------------------------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO= 1 : 1
LOWER | UPPER | | POINT | DEVIATION |
| 237 | 0001 0011 | 3463.13 | 3720.0 | 1.7 | 1.7 | 12.9 | 3722.2 | -2.2 |
| 238 | 0001 0010 | 3478.75 | 3744.1 | -0.2 | 1.9 | 24.1 | 3738.0 | 6.1 |
| 239 | 0001 0001 | 3494.38 | 3758.4 | -1.9 | -1.8 | 14.3 | 3753.9 | 4.5 |
| 240 | 0001 0000 | 3710.00 | 3780.1 | -1.6 | -1.5 | 21.7 | 3769.8 | 10.3 |
| 241 | 0000 1111 | 3725.63 | 3782.3 | 1.7 | 0.0 | 2.2 | 3785.7 | -3.4 |
| 242 | 0000 1110 | 3741.25 | 3800.1 | 1.8 | 2.0 | 17.8 | 3801.6 | -1.5 |
| 243 | 0000 1101 | 3756.88 | 3819.3 | -1.9 | 0.0 | 19.2 | 3817.4 | 1.8 |
| 244 | 0000 1100 | 3772.50 | 3839.9 | -2.1 | -2.0 | 20.6 | 3834.3 | 6.1 |
| 245 | 0000 1011 | 3788.13 | 3850.5 | 0.0 | -1.7 | 10.6 | 3849.2 | 1.2 |
| 246 | 0000 1010 | 3803.75 | 3869.4 | 1.8 | 2.0 | 18.9 | 3861.1 | 4.3 |
| 247 | 0000 1001 | 3819.38 | 3885.3 | 1.8 | 1.8 | 15.9 | 3881.0 | 4.4 |
| 248 | 0000 1000 | 3835.00 | 3904.8 | 0.2 | -0.1 | 19.5 | 3896.9 | 8.0 |
| 249 | 0000 0111 | 3850.63 | 3912.7 | -1.8 | -1.8 | 7.8 | 3912.7 | -0.1 |
| 250 | 0000 0110 | 3866.25 | 3931.3 | 1.8 | 0.1 | 18.6 | 3928.6 | 2.7 |
| 251 | 0000 0101 | 3881.88 | 3946.9 | 1.9 | 2.0 | 15.5 | 3944.1 | 2.4 |
| 252 | 0000 0100 | 3897.50 | 3969.6 | -0.2 | 2.1 | 22.8 | 3960.4 | 9.3 |
| 253 | 0000 0011 | 3913.13 | 3979.2 | -1.9 | -1.9 | 9.5 | 3976.3 | 2.9 |
| 254 | 0000 0010 | 3928.75 | 4004.7 | -2.2 | -1.9 | 25.5 | 3992.2 | 12.6 |
| 255 | 0000 0001 | 3944.38 | 4014.1 | 1.8 | 0.1 | 9.4 | 4008.0 | 6.1 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 92
 1981/12/02 08:35:16 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.5-B A/D THRESHOLD TEST (BAND= 6, SENSOR=1)
 SUMMARY

HAC
TEST
S27

DEC 02 '81

CHECK 1) RMS ERROR, 2) THRESHOLD INCREMENT(+/- 0.0 <= THRESH INC <= 31.2)
 THE REMAINING DATA ARE FOR INFORMATION ONLY

BEST FIT STRAIGHT LINE IS: $Y = 15.475X - 21.2MV$

DEVIATION OF SLOPE FROM IDEAL IS: -0.960%

OFFSET IS: -21.2MV

COEFFICIENT OF DETERMINATION IS: $R^2 = .99998390$

ANALOG INPUT DURING DC RESTORE IS: 63.9MV

RMS ERROR = 4.576MV REQMT: RMS ERROR <= 7.812MV

THRESHOLD INCREMENT MEASUREMENT

| MAXIMUM THRESHOLD # | AVERAGE | MINIMUM THRESHOLD # | STANDARD DEVIATION |
|---------------------|----------|---------------------|--------------------|
| 30.7MV*E 193 | 15.546MV | -1.5MV*E 200 | 6.243MV |

LOWER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

| MAXIMUM THRESHOLD # | AVERAGE | MINIMUM THRESHOLD # | STANDARD DEVIATION |
|---------------------|----------|---------------------|--------------------|
| 1.6MV 168 | -0.258MV | -5.9MV 229 | 1.464MV |

UPPER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

| MAXIMUM THRESHOLD # | AVERAGE | MINIMUM THRESHOLD # | STANDARD DEVIATION |
|---------------------|---------|---------------------|--------------------|
| 6.9MV 203 | 0.044MV | -4.0MV 216 | 1.425MV |

TEST FAILED

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Test failed see FR # F4265 By 12/2/81
See Q.C.H.R. Sheet #13 Line #8

HAC
TEST
S27

DEC 02 '81

HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 93
 1981/12/02 08:35:29 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5-13.5-B A/D THRESHOLD TEST (RANGE) = 3.5-13.5-1



DEC 2 '81

| THRESHOLD A/D OUTPUT
NUMBER THRESHOLD | IDFAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |

THE FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | | |
|----|-----------|---------|-------|------|------|------|-------|------|
| 1 | 1111 1111 | -24.375 | -15.0 | -2.1 | 0.2 | | -5.7 | -9.4 |
| 2 | 1111 1110 | -8.750 | 1.5 | -1.7 | -1.6 | 16.6 | 9.8 | -8.2 |
| 3 | 1111 1101 | 6.875 | 20.6 | -0.0 | -1.4 | 19.0 | 25.3 | -4.7 |
| 4 | 1111 1100 | 22.500 | 32.1 | 1.2 | 1.2 | 11.5 | 40.7 | -8.7 |
| 5 | 1111 1011 | 38.125 | 49.8 | -0.1 | 1.3 | 17.7 | 56.2 | -6.4 |
| 6 | 1111 1010 | 53.750 | 68.2 | -1.7 | -1.6 | 18.4 | 71.7 | -3.5 |
| 7 | 1111 1001 | 69.375 | 86.4 | -1.3 | -1.3 | 18.2 | 87.2 | -0.8 |
| 8 | 1111 1000 | 85.000 | 93.8 | 1.6 | -0.1 | 7.4 | 102.6 | -8.8 |
| 9 | 1111 0111 | 100.625 | 110.4 | 1.2 | 1.2 | 16.6 | 118.1 | -7.7 |
| 10 | 1111 0110 | 116.250 | 128.7 | -0.1 | 1.5 | 18.2 | 134.6 | -4.9 |
| 11 | 1111 0101 | 131.875 | 147.0 | -1.4 | -1.3 | 18.3 | 149.1 | -2.1 |
| 12 | 1111 0100 | 147.500 | 162.6 | -0.1 | -1.1 | 15.5 | 164.5 | -2.0 |
| 13 | 1111 0011 | 163.125 | 176.1 | 1.3 | 1.3 | 13.5 | 180.0 | -3.9 |
| 14 | 1111 0010 | 178.750 | 195.2 | 1.5 | 1.6 | 19.1 | 195.5 | -0.3 |
| 15 | 1111 0001 | 194.375 | 212.6 | -1.3 | -0.0 | 17.4 | 211.0 | 1.6 |
| 16 | 1111 0000 | 210.000 | 223.3 | -0.8 | -0.8 | 10.7 | 226.4 | -3.1 |
| 17 | 1110 1111 | 225.625 | 236.5 | 0.0 | -1.3 | 13.2 | 241.9 | -5.4 |
| 18 | 1110 1110 | 241.250 | 252.0 | 1.5 | 1.6 | 15.5 | 257.4 | -5.4 |
| 19 | 1110 1101 | 256.875 | 270.5 | -0.1 | 1.3 | 18.5 | 272.9 | -2.4 |
| 20 | 1110 1100 | 272.500 | 287.5 | -1.2 | -1.1 | 17.0 | 288.3 | -0.9 |
| 21 | 1110 1011 | 288.125 | 302.2 | -1.3 | -1.3 | 14.7 | 303.8 | -1.6 |
| 22 | 1110 1010 | 303.750 | 318.5 | 1.5 | 0.0 | 16.3 | 319.3 | -0.8 |
| 23 | 1110 1001 | 319.375 | 336.1 | 1.2 | 1.2 | 17.6 | 334.8 | 1.3 |
| 24 | 1110 1000 | 335.000 | 348.1 | -0.0 | 1.6 | 12.0 | 350.2 | -2.1 |
| 25 | 1110 0111 | 350.625 | 362.5 | -1.3 | -1.4 | 14.4 | 365.7 | -3.2 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL .. FLT. S/N

PAGE 94

1981/12/02 08:35:29 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS

3.5-3.5-A A/D THRESHOLD TEST (RAND= 4. SENSOR=1

HAC
TEST
S27

0002

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO= 1 : 1 | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|--|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 26 | 1110 0110 | 366.250 | 381.7 | -0.0 | -1.5 | 19.1 | 381.2 | 0.5 |
| 27 | 1110 0101 | 381.875 | 396.4 | 1.3 | 1.3 | 14.7 | 396.2 | -0.3 |
| 28 | 1110 0100 | 397.500 | 415.2 | 1.0 | 1.1 | 18.8 | 412.1 | 3.0 |
| 29 | 1110 0011 | 413.125 | 427.9 | -1.3 | -0.1 | 12.8 | 427.6 | 0.3 |
| 30 | 1110 0010 | 428.750 | 448.0 | -1.5 | -1.5 | 20.1 | 443.1 | 4.9 |
| 31 | 1110 0001 | 444.375 | 462.9 | -0.0 | -1.2 | 14.9 | 458.6 | 4.4 |
| 32 | 1110 0000 | 460.000 | 465.7 | 1.6 | 1.6 | 2.8 | 474.0 | -8.3 |
| 33 | 1101 1111 | 475.625 | 484.6 | -0.0 | 1.4 | 18.9 | 489.5 | -4.9 |
| 34 | 1101 1110 | 491.250 | 501.5 | -1.5 | -1.5 | 16.8 | 505.0 | -3.5 |
| 35 | 1101 1101 | 506.875 | 521.3 | -1.5 | -1.4 | 19.8 | 520.5 | 0.9 |
| 36 | 1101 1100 | 522.500 | 532.6 | 1.1 | 0.0 | 11.2 | 535.9 | -3.4 |
| 37 | 1101 1011 | 538.125 | 550.1 | 1.3 | 1.4 | 17.5 | 551.4 | -1.3 |
| 38 | 1101 1010 | 553.750 | 566.2 | -0.1 | 1.5 | 16.1 | 566.9 | -0.7 |
| 39 | 1101 1001 | 569.375 | 586.5 | -1.4 | -1.4 | 20.3 | 582.4 | 4.1 |
| 40 | 1101 1000 | 585.000 | 597.4 | -0.0 | -1.6 | 11.0 | 597.8 | -0.4 |
| 41 | 1101 0111 | 600.625 | 610.2 | 1.3 | 1.3 | 12.7 | 613.3 | -3.1 |
| 42 | 1101 0110 | 616.250 | 627.6 | 1.5 | 1.6 | 17.4 | 628.8 | -1.2 |
| 43 | 1101 0101 | 631.875 | 646.5 | -1.4 | -0.0 | 18.9 | 644.3 | 2.2 |
| 44 | 1101 0100 | 647.500 | 662.0 | -1.2 | -1.2 | 15.5 | 659.7 | 2.3 |
| 45 | 1101 0011 | 663.125 | 676.5 | 0.0 | -1.3 | 14.5 | 675.2 | 1.3 |
| 46 | 1101 0010 | 678.750 | 693.6 | 1.5 | 1.4 | 17.0 | 690.7 | 2.9 |
| 47 | 1101 0001 | 694.375 | 710.2 | 0.0 | 1.3 | 16.6 | 706.2 | 4.1 |
| 48 | 1101 0000 | 710.000 | 727.0 | -0.8 | -0.8 | 16.7 | 721.6 | 5.3 |
| 49 | 1100 1111 | 725.625 | 735.2 | -1.3 | -1.3 | 8.3 | 737.1 | -1.9 |
| 50 | 1100 1110 | 741.250 | 749.8 | 1.4 | -0.1 | 14.6 | 752.6 | -2.8 |
| 51 | 1100 1101 | 756.875 | 768.7 | 1.5 | 1.5 | 18.9 | 768.1 | 0.6 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 95
 1981/12/02 08:35:29 FINAL ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.5-4 A/D THRESHOLD TEST (BAND= 5 * GENSIDE=1)

HAC
TEST
S27

DEC 02 '81

| THRESHOLD
NUMBER | A/D
OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|----------------------------|------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 52 | 1100 1100 | 772.500 | 784.4 | 0.0 | 1.0 | 15.7 | 783.5 | 0.8 |
| 53 | 1100 1011 | 788.125 | 800.1 | -1.3 | -1.4 | 15.7 | 799.0 | 1.1 |
| 54 | 1100 1010 | 803.750 | 817.0 | -0.0 | -1.5 | 16.9 | 814.5 | 2.5 |
| 55 | 1100 1001 | 819.375 | 833.6 | 1.3 | 1.3 | 16.6 | 830.0 | 3.7 |
| 56 | 1100 1000 | 835.000 | 847.7 | 1.6 | 1.6 | 14.1 | 845.4 | 2.3 |
| 57 | 1100 0111 | 850.625 | 859.9 | -1.4 | -0.1 | 12.2 | 860.9 | -1.0 |
| 58 | 1100 0110 | 866.250 | 878.0 | -1.5 | -1.5 | 18.1 | 876.4 | 1.6 |
| 59 | 1100 0101 | 881.875 | 894.5 | -0.0 | -1.3 | 16.5 | 891.9 | 2.7 |
| 60 | 1100 0100 | 897.500 | 911.8 | 1.2 | 1.1 | 17.2 | 907.3 | 4.4 |
| 61 | 1100 0011 | 913.125 | 923.1 | 0.0 | 1.3 | 11.3 | 922.8 | 0.3 |
| 62 | 1100 0010 | 928.750 | 943.6 | -1.5 | -1.5 | 20.5 | 938.3 | 5.4 |
| 63 | 1100 0001 | 944.375 | 959.1 | -1.3 | -1.3 | 15.5 | 953.8 | 5.3 |
| 64 | 1100 0000 | 960.000 | 969.5 | 0.5 | -0.0 | 10.4 | 969.2 | 0.2 |
| 65 | 1011 1111 | 975.625 | 984.9 | 1.3 | 1.3 | 15.4 | 984.7 | 0.2 |
| 66 | 1011 1110 | 991.250 | 999.1 | 0.0 | 1.4 | 14.2 | 1000.2 | -1.0 |
| 67 | 1011 1101 | 1006.88 | 1024.1 | -1.5 | -1.5 | 24.9 | 1015.7 | 8.4 |
| 68 | 1011 1100 | 1022.50 | 1030.9 | 0.0 | -1.1 | 6.8 | 1031.1 | -0.2 |
| 69 | 1011 1011 | 1038.13 | 1049.5 | 1.4 | 1.4 | 18.6 | 1046.6 | 2.9 |
| 70 | 1011 1010 | 1053.75 | 1064.6 | 1.4 | 1.4 | 15.1 | 1062.1 | 2.6 |
| 71 | 1011 1001 | 1069.38 | 1085.6 | -1.3 | -0.0 | 20.9 | 1077.6 | 8.0 |
| 72 | 1011 1000 | 1085.00 | 1092.5 | -1.6 | -1.7 | 6.9 | 1093.0 | -0.6 |
| 73 | 1011 0111 | 1100.63 | 1110.3 | 0.0 | -1.3 | 17.8 | 1108.5 | 1.8 |
| 74 | 1011 0110 | 1116.25 | 1125.4 | 1.6 | 1.5 | 15.1 | 1124.0 | 1.4 |
| 75 | 1011 0101 | 1131.88 | 1146.8 | -2.6 | 1.4 | 21.4 | 1139.5 | 7.3 |
| 76 | 1011 0100 | 1147.50 | 1158.0 | -1.4 | -1.5 | 11.2 | 1154.9 | 3.1 |
| 77 | 1011 0011 | 1163.13 | 1174.8 | -1.3 | -1.3 | 16.8 | 1170.4 | 4.4 |
| 78 | 1011 0010 | 1178.75 | 1190.8 | 1.5 | -0.0 | 16.0 | 1185.9 | 4.9 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 96
 1981/12/02 08:35:29 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.5-4 A/D THRESHOLD TEST (BAND= 4. SENSITIV= 1)

HAC
 IFST
 527

00200

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDFAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO= 1 : 1 | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|--|-------|------|------------------------------------|------------------------|------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION | |
| 79 | 1011 0001 | 1194.38 | 1208.1 | 1.3 | 1.3 | 17.3 | 1201.4 | 6.4 |
| 80 | 1011 0000 | 1210.00 | 1221.4 | 0.1 | 0.8 | 13.2 | 1216.8 | 4.4 |
| 81 | 1010 1111 | 1225.63 | 1233.1 | -1.3 | -1.4 | 11.7 | 1232.3 | 0.4 |
| 82 | 1010 1110 | 1241.25 | 1248.1 | 0.0 | -1.5 | 15.0 | 1247.8 | 0.3 |
| 83 | 1010 1101 | 1256.88 | 1269.2 | -1.5 | 1.5 | 21.1 | 1263.3 | 5.9 |
| 84 | 1010 1100 | 1272.50 | 1279.3 | 1.1 | 1.1 | 10.1 | 1278.7 | 0.4 |
| 85 | 1010 1011 | 1288.13 | 1297.5 | -1.3 | -0.1 | 18.2 | 1294.2 | 3.3 |
| 86 | 1010 1010 | 1303.75 | 1313.4 | -1.5 | -1.5 | 15.9 | 1309.7 | 3.8 |
| 87 | 1010 1001 | 1319.38 | 1332.1 | -0.1 | -1.4 | 18.6 | 1325.2 | 6.9 |
| 88 | 1010 1000 | 1335.00 | 1340.5 | 1.6 | 1.6 | 8.4 | 1340.6 | -0.2 |
| 89 | 1010 0111 | 1350.63 | 1355.5 | 0.0 | 1.4 | 15.0 | 1356.1 | -0.6 |
| 90 | 1010 0110 | 1366.25 | 1374.0 | -1.5 | -1.5 | 18.5 | 1371.6 | 2.4 |
| 91 | 1010 0101 | 1381.88 | 1394.5 | -1.4 | -1.5 | 20.5 | 1387.1 | 7.4 |
| 92 | 1010 0100 | 1397.50 | 1406.0 | 1.1 | -0.0 | 11.5 | 1402.5 | 3.4 |
| 93 | 1010 0011 | 1413.13 | 1419.7 | 1.3 | 1.3 | 13.8 | 1418.0 | 1.7 |
| 94 | 1010 0010 | 1428.75 | 1437.7 | 0.0 | 1.4 | 18.0 | 1433.5 | 4.3 |
| 95 | 1010 0001 | 1444.38 | 1455.6 | -1.3 | -1.4 | 17.9 | 1449.0 | 6.7 |
| 96 | 1010 0000 | 1460.00 | 1461.1 | 0.0 | -1.7 | 5.4 | 1464.4 | -4.3 |
| 97 | 1001 1111 | 1475.63 | 1477.0 | 1.4 | 1.3 | 15.9 | 1479.9 | -2.9 |
| 98 | 1001 1110 | 1491.25 | 1490.4 | 1.4 | 1.5 | 13.4 | 1491.4 | -4.9 |
| 99 | 1001 1101 | 1506.88 | 1512.5 | -1.5 | 3.3 | 22.0 | 1510.9 | 1.6 |
| 100 | 1001 1100 | 1522.50 | 1522.6 | -1.2 | -1.2 | 10.1 | 1524.3 | -3.7 |
| 101 | 1001 1011 | 1538.13 | 1542.7 | -0.1 | -1.4 | 20.1 | 1541.8 | 0.9 |
| 102 | 1001 1010 | 1553.75 | 1555.6 | 1.4 | 1.4 | 12.9 | 1557.3 | -1.7 |
| 103 | 1001 1001 | 1569.38 | 1579.2 | -2.8 | 1.4 | 23.6 | 1572.8 | 6.4 |
| 104 | 1001 1000 | 1585.00 | 1585.7 | -1.5 | -1.5 | 6.5 | 1588.2 | -2.5 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL... FLT. S/N PAGE 97
 1981/12/02 08:35:29 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.5-R A/D THRESHOLD TEST (BAND= A. SPENTHICAL)

HAC
TEST
S27

0028

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-----------------|---------------------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS
LOWER | RATIO= 1:1
UPPER | | POINT | DEVIATION |
| 105 | 1001 0111 | 1600.63 | 1602.0 | -1.3 | -1.3 | 16.2 | 1603.7 | -1.7 |
| 106 | 1001 0110 | 1616.25 | 1616.2 | 1.5 | -0.1 | 14.2 | 1619.2 | -3.0 |
| 107 | 1001 0101 | 1631.88 | 1634.9 | 1.6 | 1.6 | 18.7 | 1634.7 | 0.3 |
| 108 | 1001 0100 | 1647.50 | 1648.1 | 0.0 | 1.2 | 13.1 | 1650.1 | -2.1 |
| 109 | 1001 0011 | 1663.13 | 1666.2 | -1.4 | -1.4 | 18.1 | 1665.6 | 0.6 |
| 110 | 1001 0010 | 1678.75 | 1682.8 | 0.0 | -1.5 | 16.6 | 1681.1 | 1.7 |
| 111 | 1001 0001 | 1694.38 | 1699.4 | 1.4 | 1.3 | 16.5 | 1696.6 | 2.8 |
| 112 | 1001 0000 | 1710.00 | 1714.5 | 0.8 | 0.8 | 15.1 | 1712.0 | 2.5 |
| 113 | 1000 1111 | 1725.63 | 1724.3 | -1.4 | -0.0 | 9.8 | 1727.5 | -3.2 |
| 114 | 1000 1110 | 1741.25 | 1738.5 | -1.5 | -1.5 | 14.2 | 1741.0 | -4.5 |
| 115 | 1000 1101 | 1756.88 | 1761.6 | -3.4 | -1.5 | 23.1 | 1758.5 | 3.1 |
| 116 | 1000 1100 | 1772.50 | 1770.0 | 1.2 | 1.1 | 8.4 | 1773.9 | -3.9 |
| 117 | 1000 1011 | 1788.13 | 1787.1 | 0.1 | 1.4 | 17.1 | 1789.4 | -2.3 |
| 118 | 1000 1010 | 1803.75 | 1803.5 | -1.4 | -1.4 | 16.4 | 1804.9 | -1.4 |
| 119 | 1000 1001 | 1819.38 | 1826.3 | -1.4 | -1.5 | 22.8 | 1820.4 | 6.0 |
| 120 | 1000 1000 | 1835.00 | 1833.2 | 1.5 | -0.1 | 6.8 | 1835.8 | -2.7 |
| 121 | 1000 0111 | 1850.63 | 1846.3 | 1.4 | 1.4 | 13.1 | 1851.3 | -5.0 |
| 122 | 1000 0110 | 1866.25 | 1862.6 | -0.1 | 1.3 | 16.3 | 1866.8 | -4.2 |
| 123 | 1000 0101 | 1881.88 | 1882.0 | -1.5 | -1.6 | 19.4 | 1882.3 | -0.2 |
| 124 | 1000 0100 | 1897.50 | 1897.4 | 0.0 | -1.1 | 15.4 | 1897.7 | -0.3 |
| 125 | 1000 0011 | 1913.13 | 1910.3 | 1.3 | 1.3 | 12.9 | 1913.2 | -2.9 |
| 126 | 1000 0010 | 1928.75 | 1927.6 | 1.3 | 1.4 | 17.2 | 1928.7 | -1.1 |
| 127 | 1000 0001 | 1944.38 | 1946.1 | -1.3 | -0.0 | 18.5 | 1944.2 | 2.0 |
| 128 | 1000 0000 | 1960.00 | 1961.1 | -0.3 | -0.4 | 14.9 | 1959.6 | 1.4 |
| 129 | 0111 1111 | 1975.63 | 1977.2 | 0.0 | -1.4 | 16.1 | 1975.1 | 2.1 |
| 130 | 0111 1110 | 1991.25 | 1991.0 | 1.5 | 1.5 | 13.8 | 1990.6 | 0.4 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODH.. FLT. S/N PAGE 98
 1981/12/02 08:35:29 FINALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH LOG
 21.1.13.15-4 AND THRESHOLD TEST (CRAND) - 25% SENSITIVITY - 11



DEC 02 '81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDIAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|-------------------------|----------------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO =
LOWER | 1 : 1
UPPER | | POINT | DEVIATION |
| 131 | 0111 1101 | 2006.88 | 2014.7 | -2.5 | -1.1 | 23.7 | 2006.1 | 8.6 |
| 132 | 0111 1100 | 2022.50 | 2022.4 | -1.1 | -1.1 | 7.7 | 2021.1 | 0.8 |
| 133 | 0111 1011 | 2038.13 | 2041.5 | -1.4 | -1.4 | 19.1 | 2037.0 | 4.5 |
| 134 | 0111 1010 | 2053.75 | 2056.0 | 1.4 | -0.0 | 14.1 | 2052.1 | 3.6 |
| 135 | 0111 1001 | 2069.38 | 2076.8 | 1.4 | 1.5 | 20.8 | 2068.0 | 8.9 |
| 136 | 0111 1000 | 2085.00 | 2079.3 | -0.0 | 1.6 | 2.5 | 2083.4 | -4.1 |
| 137 | 0111 0111 | 2100.63 | 2100.8 | -1.4 | -1.4 | 21.5 | 2098.9 | 1.9 |
| 138 | 0111 0110 | 2116.25 | 2118.1 | 0.1 | -1.5 | 17.3 | 2114.4 | 3.7 |
| 139 | 0111 0101 | 2131.88 | 2135.9 | 1.4 | 1.4 | 17.8 | 2129.9 | 6.0 |
| 140 | 0111 0100 | 2147.50 | 2147.7 | 1.2 | 1.2 | 11.8 | 2145.1 | 2.4 |
| 141 | 0111 0011 | 2163.13 | 2164.9 | -1.3 | -0.0 | 17.2 | 2160.8 | 4.1 |
| 142 | 0111 0010 | 2178.75 | 2183.1 | -1.5 | -1.5 | 18.2 | 2176.3 | 6.9 |
| 143 | 0111 0001 | 2194.38 | 2199.4 | -0.1 | 1.4 | 16.2 | 2191.8 | 7.6 |
| 144 | 0111 0000 | 2210.00 | 2205.9 | 0.9 | 0.9 | 6.5 | 2207.2 | -1.1 |
| 145 | 0110 1111 | 2225.63 | 2226.2 | -4.5 | 1.5 | 20.3 | 2222.7 | 3.5 |
| 146 | 0110 1110 | 2241.25 | 2238.9 | -1.5 | -1.5 | 12.6 | 2238.2 | 0.7 |
| 147 | 0110 1101 | 2256.88 | 2259.2 | 1.0 | 1.0 | 20.4 | 2253.7 | 5.6 |
| 148 | 0110 1100 | 2272.50 | 2269.7 | 1.1 | -0.0 | 10.4 | 2269.1 | 0.6 |
| 149 | 0110 1011 | 2288.13 | 2285.9 | 1.3 | 1.3 | 16.2 | 2284.6 | 1.3 |
| 150 | 0110 1010 | 2303.75 | 2302.4 | -0.0 | 1.5 | 16.5 | 2300.1 | 2.3 |
| 151 | 0110 1001 | 2319.38 | 2323.9 | -1.5 | -1.5 | 21.5 | 2315.6 | 8.4 |
| 152 | 0110 1000 | 2335.00 | 2332.3 | 0.0 | -1.4 | 8.4 | 2331.0 | 1.1 |
| 153 | 0110 0111 | 2350.63 | 2345.1 | 1.3 | 1.3 | 12.8 | 2346.1 | -1.4 |
| 154 | 0110 0110 | 2366.25 | 2362.9 | 1.5 | 1.4 | 17.7 | 2362.0 | 0.9 |
| 155 | 0110 0101 | 2381.88 | 2382.8 | -1.4 | -0.1 | 19.9 | 2377.1 | 5.3 |
| 156 | 0110 0100 | 2397.50 | 2397.4 | -1.5 | -1.5 | 14.6 | 2392.9 | 4.1 |
| 157 | 0110 0011 | 2413.13 | 2410.4 | 0.0 | -1.3 | 13.0 | 2408.4 | 2.0 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL .. FLT. S/N PAGE 99
 1981/12/02 08:35:29 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3-5-4-5-8 A/D THRESHOLD TEST (RANGE = 4V REFERENCE = 1)



DEC 02 '81

| THRESHOLD
NUMBER | A/D OUTPUT
THRESHOLD | IDFAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---------------------|-------------------------|------------------------|---------------------------|------------------------------|-------|------------------------------------|------------------------|-----------|
| | | | NOMINAL | LEVELS RATIO= 1 : 1
LOWER | UPPER | | POINT | DEVIATION |
| 158 | 0110 0010 | 2428.75 | 2427.9 | 1.5 | 1.4 | 17.5 | 2423.9 | 4.0 |
| 159 | 0110 0001 | 2444.38 | 2437.2 | 0.0 | 1.6 | 9.3 | 2439.4 | -2.2 |
| 160 | 0110 0000 | 2460.00 | 2438.8 | -1.6 | -1.6 | 1.6 | 2434.8 | -16.0 |
| 161 | 0101 1111 | 2475.63 | 2472.5 | -1.7 | -1.7 | 33.7 | 2470.3 | 2.2 |
| 162 | 0101 1110 | 2491.25 | 2480.6 | 1.4 | 0.0 | 8.0 | 2481.8 | -5.2 |
| 163 | 0101 1101 | 2506.88 | 2505.1 | -1.3 | 1.7 | 24.5 | 2501.3 | 3.8 |
| 164 | 0101 1100 | 2522.50 | 2511.2 | 0.0 | 1.1 | 6.1 | 2516.2 | -5.3 |
| 165 | 0101 1011 | 2538.13 | 2532.1 | -1.4 | -1.5 | 20.8 | 2532.2 | -0.2 |
| 166 | 0101 1010 | 2553.75 | 2547.1 | -0.1 | -1.5 | 15.0 | 2542.2 | -0.6 |
| 167 | 0101 1001 | 2569.38 | 2566.8 | 1.5 | 1.4 | 19.7 | 2563.2 | 3.6 |
| 168 | 0101 1000 | 2585.00 | 2570.8 | 1.6 | 1.7 | 4.0 | 2573.6 | -7.9 |
| 169 | 0101 0111 | 2600.63 | 2596.0 | -1.3 | -0.1 | 25.3 | 2594.1 | 1.9 |
| 170 | 0101 0110 | 2616.25 | 2607.7 | -1.6 | -1.6 | 11.6 | 2609.6 | -1.9 |
| 171 | 0101 0101 | 2631.88 | 2627.4 | -0.0 | 1.1 | 19.7 | 2621.1 | 2.3 |
| 172 | 0101 0100 | 2647.50 | 2637.7 | 1.2 | 1.1 | 10.3 | 2638.5 | -2.8 |
| 173 | 0101 0011 | 2663.13 | 2654.0 | 0.0 | 1.3 | 16.3 | 2656.0 | -2.0 |
| 174 | 0101 0010 | 2678.75 | 2672.7 | -1.5 | -1.5 | 18.6 | 2671.5 | 1.2 |
| 175 | 0101 0001 | 2694.38 | 2689.8 | 0.6 | 0.5 | 17.1 | 2687.0 | 2.9 |
| 176 | 0101 0000 | 2710.00 | 2697.0 | 0.7 | -0.1 | 7.1 | 2702.4 | -5.1 |
| 177 | 0100 1111 | 2725.63 | 2716.5 | -0.4 | 1.6 | 19.6 | 2717.9 | -1.4 |
| 178 | 0100 1110 | 2741.25 | 2726.9 | 0.0 | 1.5 | 10.3 | 2733.4 | -6.3 |
| 179 | 0100 1101 | 2756.88 | 2752.3 | -1.5 | -1.5 | 25.5 | 2748.9 | 3.5 |
| 180 | 0100 1100 | 2772.50 | 2760.6 | 0.1 | -1.1 | 8.3 | 2764.3 | -3.7 |
| 181 | 0100 1011 | 2788.13 | 2776.4 | 1.4 | 1.3 | 15.8 | 2779.8 | -3.4 |
| 182 | 0100 1010 | 2803.75 | 2792.0 | 1.4 | 1.5 | 15.6 | 2791.3 | -3.3 |
| 183 | 0100 1001 | 2819.38 | 2813.7 | -1.4 | -0.0 | 21.7 | 2810.8 | 3.0 |

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HS-206 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 100
 1981/12/02 08:35:29 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5.3.5-8 A/D THRESHOLD TEST (RANGE) = 25 SENSITIVE =

HAC
115T
527

DC 02 81

| THRESHOLD
NUMBER | A/D
THRESHOLD | OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
NOMINAL | LEVELS RATIO= 1 : 1
LOWER | UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT | DEVIATION |
|---------------------|------------------|---------------------|------------------------|--------------------------------------|------------------------------|-------|------------------------------------|---------------------------------|-----------|
| 184 | 0100 | 1000 | 2835.00 | 2824.3 | -1.5 | -1.6 | 10.6 | 2826.2 | -1.9 |
| 185 | 0100 | 0111 | 2850.63 | 2842.1 | -5.2 | -1.5 | 17.8 | 2841.7 | 0.4 |
| 186 | 0100 | 0110 | 2866.25 | 2852.5 | 1.5 | 1.4 | 10.3 | 2857.2 | -4.7 |
| 187 | 0100 | 0101 | 2881.88 | 2874.7 | -4.3 | -1.3 | 21.7 | 2872.7 | 1.5 |
| 188 | 0100 | 0100 | 2897.50 | 2887.8 | -1.5 | -1.5 | 13.6 | 2888.1 | -0.3 |
| 189 | 0100 | 0011 | 2913.13 | 2901.1 | -1.3 | -1.3 | 13.3 | 2903.6 | -2.5 |
| 190 | 0100 | 0010 | 2928.75 | 2917.7 | 1.4 | -0.1 | 16.6 | 2919.1 | -1.4 |
| 191 | 0100 | 0001 | 2944.38 | 2929.2 | 0.5 | 0.5 | 11.4 | 2934.6 | -1.4 |
| 192 | 0100 | 0000 | 2960.00 | 2929.2 | -0.0 | 0.5 | 0.0 | 2950.0 | -20.9 |
| 193 | 0011 | 1111 | 2975.63 | 2967.9 | -1.8 | -1.8 | 38.7 | 2965.5 | 2.4 |
| 194 | 0011 | 1110 | 2991.25 | 2976.4 | -0.0 | -1.6 | 8.5 | 2981.0 | -4.6 |
| 195 | 0011 | 1101 | 3006.88 | 3000.4 | -1.3 | 1.3 | 24.0 | 2996.5 | 4.0 |
| 196 | 0011 | 1100 | 3022.50 | 3003.7 | 1.4 | 1.5 | 3.2 | 3011.9 | -8.2 |
| 197 | 0011 | 1011 | 3038.13 | 3027.3 | -1.3 | 0.0 | 23.6 | 3027.4 | -0.1 |
| 198 | 0011 | 1010 | 3053.75 | 3041.8 | -1.6 | -1.6 | 14.5 | 3042.9 | -1.0 |
| 199 | 0011 | 1001 | 3069.38 | 3063.2 | -0.0 | -1.5 | 21.3 | 3058.4 | 4.8 |
| 200 | 0011 | 1000 | 3085.00 | 3061.6 | 1.5 | 1.5 | -1.5 | 3071.8 | -12.2 |
| 201 | 0011 | 0111 | 3100.63 | 3091.3 | -5.7 | 1.7 | 29.6 | 3089.3 | 2.0 |
| 202 | 0011 | 0110 | 3116.25 | 3102.7 | -1.5 | -1.5 | 11.4 | 3104.8 | -2.1 |
| 203 | 0011 | 0101 | 3131.88 | 3126.7 | -1.4 | -1.4 | 24.0 | 3118.3 | 6.4 |
| 204 | 0011 | 0100 | 3147.50 | 3130.6 | 1.3 | -0.0 | 4.0 | 3135.2 | -5.1 |
| 205 | 0011 | 0011 | 3163.13 | 3150.2 | 1.3 | 1.3 | 19.5 | 3141.2 | -1.0 |
| 206 | 0011 | 0010 | 3178.75 | 3166.6 | -0.0 | 1.4 | 16.4 | 3166.2 | -0.1 |
| 207 | 0011 | 0001 | 3194.38 | 3188.1 | -1.4 | -1.4 | 21.5 | 3182.2 | 5.0 |
| 208 | 0011 | 0000 | 3210.00 | 3190.0 | -9.1 | -1.1 | 1.8 | 3197.5 | -7.7 |
| 209 | 0010 | 1111 | 3225.63 | 3213.3 | 1.6 | 1.6 | 23.3 | 3213.1 | 0.2 |

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HS-216 THE MATIL MAPPER MIX UNIT TEST HIGH L. FLT. 5/11 PAGE 1
 1981/12/02 08:30:29 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MEASUREMENTS
 3.5-3.5-11 AND THRESHOLD TEST (HAND-2.5-3.5-11)

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VOLTAGE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM 3.5-11
THRESHOLD | PERCENT DEVIATION | |
|--|--------------------------|---------------------------|-------|-------|--------------------------------------|-------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | PERCENT | DEVIATION |
| 210 0010 1110 | 3241.25 | 3222.8 | 1.4 | 1.5 | 9.5 | 3222.8 | -5.2 |
| 211 0010 1101 | 3256.88 | 3249.2 | -1.3 | 0.1 | 26.4 | 3249.2 | -2.3 |
| 212 0010 1100 | 3272.50 | 3255.0 | -1.1 | -1.1 | 5.8 | 3255.0 | -4.3 |
| 213 0010 1011 | 3288.13 | 3274.8 | 0.0 | 5.1 | 19.8 | 3274.8 | -4.7 |
| 214 0010 1010 | 3303.75 | 3288.4 | 1.5 | 1.5 | 13.6 | 3288.4 | -2.1 |
| 215 0010 1001 | 3319.38 | 3310.1 | -0.1 | 1.3 | 21.7 | 3310.1 | -4.1 |
| 216 0010 1000 | 3335.00 | 3319.2 | -1.3 | -4.0 | 9.1 | 3319.2 | -2.2 |
| 217 0010 0111 | 3350.63 | 3340.3 | -1.6 | -1.5 | 21.1 | 3340.3 | -3.4 |
| 218 0010 0110 | 3366.25 | 3349.4 | 1.4 | -0.1 | 9.1 | 3349.4 | -1.9 |
| 219 0010 0101 | 3381.88 | 3372.9 | -1.9 | 1.5 | 23.4 | 3372.9 | -1.0 |
| 220 0010 0100 | 3397.50 | 3381.4 | 0.0 | 1.1 | 8.5 | 3381.4 | -2.6 |
| 221 0010 0011 | 3413.13 | 3399.3 | -1.4 | -1.3 | 17.9 | 3399.3 | -0.5 |
| 222 0010 0010 | 3428.75 | 3416.6 | -0.1 | -1.4 | 17.3 | 3416.6 | -2.4 |
| 223 0010 0001 | 3444.38 | 3425.4 | 1.4 | 1.4 | 8.7 | 3425.4 | -2.9 |
| 224 0010 0000 | 3460.00 | 3425.4 | 1.4 | 1.4 | 0.1 | 3425.4 | -19.8 |
| 225 0001 1111 | 3475.63 | 3461.4 | -5.4 | 0.0 | 36.0 | 3461.4 | -0.7 |
| 226 0001 1110 | 3491.25 | 3470.0 | -1.7 | -1.5 | 8.6 | 3470.0 | -4.1 |
| 227 0001 1101 | 3506.88 | 3496.5 | -0.1 | -1.5 | 26.5 | 3496.5 | -4.9 |
| 228 0001 1100 | 3522.50 | 3498.1 | 1.5 | 1.4 | 1.6 | 3498.1 | -9.0 |
| 229 0001 1011 | 3538.13 | 3526.8 | -5.9 | 1.7 | 28.7 | 3526.8 | -4.7 |
| 230 0001 1010 | 3553.75 | 3535.9 | -1.4 | -1.4 | 9.0 | 3535.9 | -2.7 |
| 231 0001 1001 | 3569.38 | 3556.9 | -1.5 | -1.5 | 21.0 | 3556.9 | -3.1 |
| 232 0001 1000 | 3585.00 | 3557.8 | 1.5 | -0.0 | 0.9 | 3557.8 | -11.2 |
| 233 0001 0111 | 3600.63 | 3585.9 | 1.4 | 1.6 | 28.1 | 3585.9 | -1.4 |
| 234 0001 0110 | 3616.25 | 3595.8 | -0.0 | 1.4 | 9.9 | 3595.8 | -4.7 |
| 235 0001 0101 | 3631.88 | 3621.8 | -1.7 | -1.5 | 26.0 | 3621.8 | -4.3 |
| 236 0001 0100 | 3647.50 | 3627.1 | -0.0 | -1.2 | 5.1 | 3627.1 | -1.9 |

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 OF POOR QUALITY

1-236 THEMATIC MAPPER MIX UNIT TEST MODEL NO. FLT. S/N PAGE 117
 08/12/02 08:35:29 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MEASUREMENTS
 5.3.14-8 AND THRESHOLD TEST (CONT.)



2128

| THRESHOLD AND OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | MEASUREMENT | DIFFERENCE |
|--|------------------------|---------------------------|-------|-------|------------------------------------|-------------|------------|
| | | NOMINAL | LOWER | UPPER | | | |
| 237 0001 0011 | 3663.13 | 3646.1 | 1.2 | 1.3 | 19.0 | 3646.4 | -0.3 |
| 238 0001 0010 | 3678.75 | 3661.9 | 1.3 | 1.4 | 15.8 | 3661.9 | 0.5 |
| 239 0001 0001 | 3694.38 | 3684.0 | -1.4 | -0.1 | 22.1 | 3677.4 | 0.7 |
| 240 0001 0000 | 3710.00 | 3686.9 | -1.0 | -0.9 | 2.9 | 3692.8 | -6.4 |
| 241 0000 1111 | 3725.63 | 3710.6 | -0.1 | -0.2 | 23.7 | 3708.3 | 2.9 |
| 242 0000 1110 | 3741.25 | 3718.3 | 1.4 | 1.4 | 7.7 | 3724.8 | -5.5 |
| 243 0000 1101 | 3756.88 | 3744.1 | -4.2 | 1.5 | 25.8 | 3729.3 | 4.8 |
| 244 0000 1100 | 3772.50 | 3751.0 | -1.2 | -1.1 | 6.9 | 3745.7 | -4.8 |
| 245 0000 1011 | 3788.13 | 3777.7 | -1.7 | -1.6 | 26.7 | 3770.2 | 7.5 |
| 246 0000 1010 | 3803.75 | 3784.5 | 1.5 | -0.0 | 6.8 | 3785.7 | -1.5 |
| 247 0000 1001 | 3819.38 | 3804.7 | 1.3 | 1.5 | 20.2 | 3801.2 | 3.6 |
| 248 0000 1000 | 3835.00 | 3811.4 | -1.3 | -0.0 | 6.6 | 3814.6 | -5.2 |
| 249 0000 0111 | 3850.63 | 3837.0 | -1.9 | -1.6 | 25.6 | 3832.1 | 4.2 |
| 250 0000 0110 | 3866.25 | 3847.3 | -0.1 | -1.4 | 10.3 | 3847.6 | -0.3 |
| 251 0000 0101 | 3881.88 | 3864.5 | 1.3 | 1.4 | 17.2 | 3863.1 | 1.5 |
| 252 0000 0100 | 3897.50 | 3878.4 | 1.0 | 1.2 | 13.9 | 3878.5 | -0.1 |
| 253 0000 0011 | 3913.13 | 3897.1 | -1.3 | 6.9 | 18.6 | 3894.6 | 1.1 |
| 254 0000 0010 | 3928.75 | 3913.7 | -1.5 | -1.5 | 16.4 | 3919.5 | 4.2 |
| 255 0000 0001 | 3944.38 | 3933.6 | -0.1 | -1.3 | 19.8 | 3923.0 | 8.6 |

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IS-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 103
 1981/12/02 08:41:53 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 1.5.3.5-B A/D THRESHOLD TEST (BAND= 7. SENSE=3
 S U M M A R Y



12/02/81

IFCK 1) RMS ERROR, 2) THRESHOLD INCREMENT(+/- 0.0 := THRH INC := 31.2)
 IE REMAINING DATA ARE FOR INFORMATION ONLY

BEST FIT STRAIGHT LINE IS: $Y = -15.874X - 49.3MV$

DEVIATION OF SLOPE FROM IDEAL IS: 1.594%
 OFFSET IS: -49.3MV
 COEFFICIENT OF DETERMINATION IS: $R^2 = .99998030$
 ANALOG INPUT DURING DC RESTORE IS: 64.0MV

RMS ERROR = 4.774MV REQMT: RMS ERROR <= 7.812MV

THRESHOLD INCREMENT MEASUREMENT

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 27.5MV | 195 | 15.945MV | 0.6MV | 253 | 5.979MV |

LOWER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|----------|---------|-------------|--------------------|
| 1.3MV | 138 | -0.131MV | -5.0MV | 208 | 1.142MV |

UPPER LIMIT AT OUTPUT LEVELS RATIO = 1 : 1

| MAXIMUM | THRESHOLD # | AVERAGE | MINIMUM | THRESHOLD # | STANDARD DEVIATION |
|---------|-------------|---------|---------|-------------|--------------------|
| 7.4MV | 64 | 0.081MV | -1.7MV | 88 | 1.170MV |

TEST PASSED

ORIGINAL PAGE 19
 OF POOR QUALITY

-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 104

81/12/02 08:42:07 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH RUN

15.3.5-B A/D THRESHOLD TEST (RAND= 7.5 SE-N5402-1



0.02 63

| THRESHOLD A/D OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|--|------------------------|---------------------------|---------------------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| | | | LEVELS RATIO= 1 : 1 | | | | |

E FOLLOWING DATA ARE FOR INFORMATION ONLY

| | | | | | | | | |
|----|-----------|---------|-------|------|------|------|-------|------|
| 1 | 1111 1111 | -24.375 | -40.5 | -1.0 | -0.9 | | -33.5 | -7.1 |
| 2 | 1111 1110 | -8.750 | -24.4 | 1.0 | 1.1 | 16.1 | -17.6 | -6.8 |
| 3 | 1111 1101 | 6.875 | -5.2 | -0.1 | 1.1 | 19.2 | -1.7 | -3.4 |
| 4 | 1111 1100 | 22.500 | 15.8 | -1.2 | -1.0 | 21.0 | 14.1 | 1.7 |
| 5 | 1111 1011 | 38.125 | 25.4 | -1.1 | -1.0 | 9.6 | 30.0 | -4.6 |
| 6 | 1111 1010 | 53.750 | 43.8 | 1.1 | -0.0 | 18.3 | 45.9 | -2.1 |
| 7 | 1111 1001 | 69.375 | 60.4 | 1.1 | 1.2 | 16.6 | 61.8 | -1.4 |
| 8 | 1111 1000 | 85.000 | 74.1 | -0.1 | 1.1 | 13.6 | 77.6 | -3.6 |
| 9 | 1111 0111 | 100.625 | 87.7 | -1.1 | -1.1 | 13.6 | 93.5 | -5.8 |
| 10 | 1111 0110 | 116.250 | 106.5 | -0.1 | -1.2 | 18.8 | 109.4 | -2.9 |
| 11 | 1111 0101 | 131.875 | 122.7 | 1.0 | 1.1 | 16.7 | 125.3 | -2.6 |
| 12 | 1111 0100 | 147.500 | 145.5 | 0.9 | 1.1 | 22.9 | 141.1 | 4.4 |
| 13 | 1111 0011 | 163.125 | 153.4 | -1.1 | -0.0 | 7.9 | 157.0 | -3.6 |
| 14 | 1111 0010 | 178.750 | 174.7 | -1.2 | -1.1 | 21.3 | 172.9 | 1.8 |
| 15 | 1111 0001 | 194.375 | 188.3 | 1.1 | 0.1 | 13.6 | 188.8 | -0.4 |
| 16 | 1111 0000 | 210.000 | 205.1 | 1.2 | 1.2 | 16.8 | 204.6 | 0.5 |
| 17 | 1110 1111 | 225.625 | 214.7 | 0.0 | 1.1 | 9.6 | 220.5 | -5.8 |
| 18 | 1110 1110 | 241.250 | 233.0 | -1.2 | -1.3 | 18.3 | 236.4 | -3.4 |
| 19 | 1110 1101 | 256.875 | 251.9 | -1.0 | -1.0 | 18.8 | 251.3 | -0.4 |
| 20 | 1110 1100 | 272.500 | 272.5 | 1.0 | 0.0 | 20.7 | 268.1 | 4.4 |
| 21 | 1110 1011 | 288.125 | 280.5 | 1.0 | 1.0 | 8.0 | 284.0 | -4.5 |
| 22 | 1110 1010 | 303.750 | 301.6 | -1.2 | -0.0 | 21.1 | 299.9 | 1.7 |
| 23 | 1110 1001 | 319.375 | 317.7 | -1.1 | -1.0 | 16.0 | 315.8 | 1.9 |
| 24 | 1110 1000 | 335.000 | 333.4 | -0.1 | -1.1 | 15.7 | 331.6 | 1.7 |
| 25 | 1110 0111 | 350.625 | 342.6 | 1.1 | 1.1 | 9.3 | 347.5 | -4.9 |

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36 THEMATIC MAPPER MIX UNIT TEST MODEL.. FLT. S/N PAGE 111
 7/17/02 08:42:07 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 1.3.5-8 A/D THRESHOLD TEST (PAND) - 7, PENALTY



010281

| HOLD A/D OUTPUT
PER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO= 1:1 | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|----------------------------------|------------------------|--|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 1110 0110 | 366.250 | 361.4 | 1.1 | 1.1 | 18.8 | 361.4 | -1.9 |
| 1110 0101 | 381.875 | 379.8 | -1.1 | 0.0 | 18.3 | 379.3 | 6.5 |
| 1110 0100 | 397.500 | 405.4 | -1.2 | -1.2 | 25.6 | 391.1 | 10.3 |
| 1110 0011 | 413.125 | 408.3 | 1.0 | -0.0 | 7.9 | 411.0 | -2.7 |
| 1110 0010 | 428.750 | 429.6 | 1.0 | 1.1 | 21.3 | 426.9 | 2.8 |
| 1110 0001 | 444.375 | 444.3 | -0.0 | 1.1 | 14.6 | 442.7 | 1.5 |
| 1110 0000 | 460.000 | 453.4 | -1.3 | -1.2 | 9.2 | 458.6 | -1.2 |
| 1101 1111 | 475.325 | 471.7 | -1.0 | -1.0 | 18.3 | 474.5 | -2.8 |
| 1101 1110 | 491.250 | 487.3 | 1.1 | -0.1 | 15.6 | 490.4 | -3.0 |
| 1101 1101 | 506.875 | 506.7 | 1.0 | 1.0 | 19.4 | 506.2 | 0.5 |
| 1101 1100 | 522.500 | 528.0 | -1.2 | -0.1 | 21.3 | 522.1 | 1.9 |
| 1101 1011 | 538.125 | 537.4 | -1.1 | -1.0 | 9.4 | 538.0 | -0.6 |
| 1101 1010 | 553.750 | 556.6 | -0.0 | -1.2 | 19.2 | 551.9 | 2.9 |
| 1101 1001 | 569.375 | 572.3 | 1.1 | 1.1 | 15.6 | 569.7 | 2.5 |
| 1101 1000 | 585.000 | 586.9 | 1.2 | 1.1 | 14.6 | 585.6 | 1.3 |
| 1101 0111 | 600.625 | 599.4 | -1.1 | 0.0 | 12.5 | 601.5 | -2.1 |
| 1101 0110 | 616.250 | 617.7 | -1.7 | -1.2 | 18.3 | 617.4 | 0.4 |
| 1101 0101 | 631.875 | 634.2 | 1.0 | -0.0 | 16.5 | 633.2 | 1.0 |
| 1101 0100 | 647.500 | 657.0 | 1.1 | 1.1 | 22.8 | 649.1 | 7.9 |
| 1101 0011 | 663.125 | 663.7 | -0.0 | 1.0 | 6.7 | 665.0 | -1.3 |
| 1101 0010 | 678.750 | 685.7 | -1.1 | -1.2 | 22.0 | 680.9 | 4.8 |
| 1101 0001 | 694.375 | 700.6 | -1.1 | -1.1 | 14.9 | 696.7 | 3.9 |
| 1101 0000 | 710.000 | 718.1 | 1.1 | 0.0 | 17.5 | 712.6 | 5.5 |
| 1100 1111 | 725.625 | 725.6 | 1.1 | 1.2 | 7.5 | 728.5 | -2.9 |
| 1100 1110 | 741.250 | 743.5 | -1.3 | -0.1 | 17.9 | 744.4 | -0.9 |
| 1100 1101 | 756.875 | 767.5 | -1.7 | 2.0 | 19.0 | 760.2 | 2.3 |

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36 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 106
 /17/07 08:42:07 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS

1.3.5-8 A/D THRESHOLD TEST (RANGE = 2% SENSITIVITY)



| A/D OUTPUT
REF THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|-----------------------------|------------------------|---------------------------|------------------------------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LEVELS RATIO= 1 : 1
LOWER | UPPER | | POINT | DEVIATION |
| 1100 1100 | 772.500 | 785.1 | -0.1 | -1.1 | 22.5 | 776.1 | 8.9 |
| 1100 1011 | 788.125 | 790.9 | 1.1 | 1.1 | 5.9 | 792.0 | -1.0 |
| 1100 1000 | 803.750 | 810.2 | 1.1 | 1.2 | 19.3 | 807.9 | 2.4 |
| 1100 1001 | 819.375 | 827.8 | -1.1 | 0.0 | 17.5 | 823.7 | 4.1 |
| 1100 1000 | 835.000 | 845.8 | -1.2 | -1.1 | 18.0 | 839.6 | 6.2 |
| 1100 0111 | 850.625 | 852.6 | 1.1 | 0.0 | 6.8 | 851.5 | -2.9 |
| 1100 0110 | 866.250 | 870.9 | 1.1 | 1.1 | 18.3 | 871.3 | -0.5 |
| 1100 0101 | 881.875 | 888.3 | 0.0 | 1.1 | 17.4 | 887.2 | 1.0 |
| 1100 0100 | 897.500 | 914.2 | -1.1 | -1.0 | 25.9 | 903.1 | 11.1 |
| 1100 0011 | 913.125 | 918.7 | -1.1 | -1.1 | 4.5 | 919.0 | -0.3 |
| 1100 0010 | 928.750 | 938.5 | 1.1 | -0.1 | 19.8 | 934.8 | 9.6 |
| 1100 0001 | 944.375 | 953.3 | 1.1 | 1.1 | 14.8 | 950.7 | 2.6 |
| 1100 0000 | 960.000 | 966.1 | -1.1 | 7.4 | 12.8 | 966.6 | -0.5 |
| 1011 1111 | 975.625 | 981.8 | -1.1 | -1.1 | 15.7 | 982.5 | -0.7 |
| 1011 1110 | 991.250 | 997.9 | 0.0 | -1.3 | 16.1 | 998.3 | -0.4 |
| 1011 1101 | 1006.88 | 1019.6 | 1.1 | 1.1 | 21.7 | 1014.2 | 5.4 |
| 1011 1100 | 1022.50 | 1036.0 | 1.1 | 1.2 | 16.4 | 1030.1 | 5.9 |
| 1011 1011 | 1038.13 | 1046.8 | -1.1 | 0.0 | 10.8 | 1046.0 | 0.9 |
| 1011 1010 | 1053.75 | 1065.0 | -1.2 | -1.2 | 18.1 | 1061.8 | 3.2 |
| 1011 1001 | 1069.38 | 1081.5 | 1.0 | -0.0 | 16.5 | 1077.7 | 3.8 |
| 1011 1000 | 1085.00 | 1094.4 | 1.2 | 1.2 | 12.9 | 1091.6 | 0.9 |
| 1011 0111 | 1100.63 | 1107.2 | 0.1 | 1.1 | 12.8 | 1109.5 | -2.2 |
| 1011 0110 | 1116.25 | 1126.1 | -1.2 | -1.3 | 18.9 | 1125.3 | 0.7 |
| 1011 0101 | 1131.88 | 1147.1 | -1.1 | -1.1 | 21.0 | 1141.2 | 5.9 |
| 1011 0100 | 1147.50 | 1164.8 | 1.2 | 0.0 | 17.7 | 1157.1 | 7.7 |
| 1011 0011 | 1163.13 | 1172.1 | 1.1 | 1.1 | 7.3 | 1174.0 | -0.9 |
| 1011 0010 | 1178.75 | 1193.5 | -1.2 | -0.1 | 21.4 | 1188.9 | 4.6 |

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OF POOR QUALITY

6 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 107
 12/02 08:42:07 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH RIPS
 3.5-B A/D THRESHOLD TEST (HARD) 2.5 5.0-10.0-15.0-20.0-25.0-30.0-35.0-40.0-45.0-50.0-55.0-60.0-65.0-70.0-75.0-80.0-85.0-90.0-95.0-100.0



010200

| OLD A/D OUTPUT
ER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | TEST FIT STRAIGHT LINE | |
|--------------------------------|------------------------|---------------------------|------------------------------------|-------|------------------------------------|------------------------|------|
| | | NOMINAL | LEVELS RATIO= 1 : 1
LOWER UPPER | POINT | | DEVIATION | |
| 1011 0001 | 1194.38 | 1208.8 | -1.1 | -1.2 | 15.3 | 1204.7 | 4.1 |
| 1011 0000 | 1210.00 | 1227.6 | 0.0 | -1.1 | 18.8 | 1220.6 | 7.0 |
| 1010 1111 | 1225.63 | 1233.7 | 1.2 | 1.2 | 6.1 | 1236.5 | -2.8 |
| 1010 1110 | 1241.25 | 1249.7 | 1.3 | 1.2 | 16.0 | 1252.3 | -2.5 |
| 1010 1101 | 1256.88 | 1273.6 | -1.1 | 0.0 | 23.9 | 1268.2 | 5.4 |
| 1010 1100 | 1272.50 | 1292.9 | -1.2 | -1.2 | 19.3 | 1284.1 | 8.8 |
| 1010 1011 | 1288.13 | 1298.6 | 1.1 | 0.0 | 5.7 | 1299.9 | -1.4 |
| 1010 1010 | 1303.75 | 1316.7 | 1.1 | 1.1 | 18.2 | 1315.8 | 0.9 |
| 1010 1001 | 1319.38 | 1334.2 | -0.0 | 1.0 | 17.4 | 1331.7 | 2.5 |
| 1010 1000 | 1335.00 | 1350.6 | -1.7 | -1.7 | 16.4 | 1347.6 | 3.0 |
| 1010 0111 | 1350.63 | 1361.0 | -1.1 | -1.0 | 10.4 | 1363.4 | -2.5 |
| 1010 0110 | 1366.25 | 1377.6 | 1.1 | -0.1 | 16.6 | 1379.3 | -1.7 |
| 1010 0101 | 1381.88 | 1398.6 | -2.2 | 1.1 | 21.1 | 1395.2 | 3.5 |
| 1010 0100 | 1397.50 | 1421.5 | -1.1 | 0.0 | 22.8 | 1411.1 | 10.4 |
| 1010 0011 | 1413.13 | 1425.8 | -1.1 | -1.1 | 4.3 | 1426.9 | -1.2 |
| 1010 0010 | 1428.75 | 1446.0 | 0.0 | -1.2 | 20.2 | 1442.8 | 3.2 |
| 1010 0001 | 1444.38 | 1460.7 | 1.1 | 1.1 | 14.2 | 1458.7 | 1.5 |
| 1010 0000 | 1460.00 | 1472.9 | -1.0 | 1.2 | 12.7 | 1474.6 | -1.6 |
| 1001 1111 | 1475.63 | 1487.4 | -1.1 | 0.0 | 14.5 | 1490.4 | -3.0 |
| 1001 1110 | 1491.25 | 1503.1 | -1.2 | -1.1 | 15.7 | 1506.3 | -3.2 |
| 1001 1101 | 1506.88 | 1525.2 | 1.1 | -0.0 | 22.0 | 1522.2 | 3.0 |
| 1001 1100 | 1522.50 | 1541.5 | 1.2 | 1.2 | 16.3 | 1538.1 | 4.4 |
| 1001 1011 | 1538.13 | 1551.2 | 0.0 | 1.1 | 9.7 | 1551.9 | -2.8 |
| 1001 1010 | 1553.75 | 1569.8 | -1.2 | -1.2 | 18.7 | 1569.3 | 0.0 |
| 1001 1001 | 1569.38 | 1587.9 | -1.1 | -1.1 | 18.1 | 1587.7 | 2.2 |
| 1001 1000 | 1585.00 | 1600.3 | 1.3 | 0.0 | 12.4 | 1601.6 | -1.2 |

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THEMATIC MAPPER MUX UNIT TEST MODFI.. FLT. S/N PAGE 108
 2/02 08:42:07 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3-5-4 A/D THRESHOLD TEST (HAND) = 2% DEFASHEE

HAC
 TEST
 S27

DEC 02 '81

| ID A/D OUTPUT
R THRESHOLD | TIDFAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|------------------------------|-------------------------|---------------------------|-------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LOWER | UPPER | | POINT | DEVIATION |
| 1001 0111 | 1600.63 | 1612.5 | 1.1 | 1.2 | 12.1 | 1612.4 | -0.0 |
| 1001 0110 | 1616.25 | 1631.0 | -1.2 | -0.1 | 18.5 | 1633.3 | -2.3 |
| 1001 0101 | 1631.88 | 1652.5 | -1.1 | -1.1 | 21.5 | 1649.2 | 3.3 |
| 1001 0100 | 1647.50 | 1671.2 | 0.0 | -1.1 | 18.7 | 1665.1 | 5.1 |
| 1001 0011 | 1663.13 | 1677.2 | 1.2 | 1.2 | 6.0 | 1680.9 | -3.7 |
| 1001 0010 | 1678.75 | 1697.2 | 1.1 | 1.1 | 19.9 | 1696.8 | 0.4 |
| 1001 0001 | 1694.38 | 1714.0 | -1.1 | -0.0 | 16.8 | 1712.7 | 1.3 |
| 1001 0000 | 1710.00 | 1734.9 | -1.2 | -1.2 | 20.9 | 1728.5 | 6.3 |
| 1000 1111 | 1725.63 | 1738.8 | 1.0 | 0.0 | 3.9 | 1744.4 | -0.7 |
| 1000 1110 | 1741.25 | 1754.6 | 1.0 | 1.0 | 15.8 | 1760.3 | -0.7 |
| 1000 1101 | 1756.83 | 1779.8 | -2.0 | 1.1 | 25.2 | 1776.2 | 3.6 |
| 1000 1100 | 1772.50 | 1797.9 | -1.2 | -1.2 | 18.1 | 1792.0 | 5.9 |
| 1000 1011 | 1788.13 | 1804.6 | -1.1 | -1.1 | 6.7 | 1807.9 | -3.3 |
| 1000 1010 | 1803.75 | 1821.4 | 1.1 | -0.0 | 16.7 | 1823.8 | -2.4 |
| 1000 1001 | 1819.38 | 1839.2 | 1.1 | 1.2 | 17.8 | 1839.7 | -0.5 |
| 1000 1000 | 1835.00 | 1857.4 | -1.2 | 2.6 | 18.2 | 1857.5 | 1.9 |
| 1000 0111 | 1850.63 | 1866.0 | -1.1 | -1.1 | 8.6 | 1871.4 | -0.4 |
| 1000 0110 | 1866.25 | 1883.4 | 0.1 | -1.2 | 17.4 | 1887.3 | -3.9 |
| 1000 0101 | 1881.88 | 1903.8 | 1.1 | 1.2 | 20.4 | 1903.2 | 0.6 |
| 1000 0100 | 1897.50 | 1924.9 | 1.1 | 1.1 | 21.1 | 1919.0 | 5.8 |
| 1000 0011 | 1913.13 | 1930.6 | -1.1 | 0.0 | 5.7 | 1934.9 | -3.3 |
| 1000 0010 | 1928.75 | 1950.7 | -1.2 | -1.2 | 20.1 | 1950.8 | -0.1 |
| 1000 0001 | 1944.38 | 1965.2 | 1.0 | -0.1 | 14.5 | 1966.7 | -1.5 |
| 1000 0000 | 1960.00 | 1988.4 | 1.2 | 1.3 | 23.2 | 1982.5 | 5.9 |
| 0111 1111 | 1975.63 | 1992.1 | 0.0 | 1.2 | 3.7 | 1998.4 | 6.3 |
| 0111 1110 | 1991.25 | 2010.5 | -1.2 | -1.3 | 18.4 | 2014.3 | -3.7 |

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THEMATIC MAPPER MUX UNIT TEST MODEL., FLT. S/N PAGE 109
 2/02 08:42:07 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5--8 A/D THRESHOLD TEST (BAND)= 2% SENSITIVE

HAC
TEST
S27

DET 02 79

| D A/D OUTPUT
: THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|-----------------------------|------------------------|---------------------------|------------------------------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LEVELS RATIO= 4 : 1
LOWER | UPPER | | POINT | DEVIATION |
| 0111 1101 | 2006.88 | 2033.9 | -1.1 | -1.1 | 23.3 | 2030.2 | 3.7 |
| 0111 1100 | 2022.50 | 2049.5 | 1.2 | -0.0 | 15.6 | 2046.0 | 3.5 |
| 0111 1011 | 2038.13 | 2057.2 | 1.1 | 1.1 | 7.7 | 2061.9 | -4.7 |
| 0111 1010 | 2053.75 | 2077.4 | -1.3 | -0.1 | 20.1 | 2077.8 | -0.4 |
| 0111 1001 | 2069.38 | 2093.9 | -1.1 | -1.1 | 16.6 | 2093.7 | 0.3 |
| 0111 1000 | 2085.00 | 2107.1 | -0.0 | 1.3 | 13.2 | 2109.5 | -2.4 |
| 0111 0111 | 2100.63 | 2118.6 | 1.1 | 1.1 | 11.5 | 2125.4 | -6.8 |
| 0111 0110 | 2116.25 | 2137.3 | 1.3 | 1.2 | 18.6 | 2141.3 | -4.0 |
| 0111 0101 | 2131.88 | 2160.4 | -1.1 | 0.0 | 23.1 | 2157.1 | 3.2 |
| 0111 0100 | 2147.50 | 2179.1 | -1.2 | -1.2 | 18.7 | 2173.0 | 6.1 |
| 0111 0011 | 2163.13 | 2183.5 | 1.0 | -0.0 | 4.4 | 2188.9 | -5.4 |
| 0111 0010 | 2178.75 | 2204.7 | 1.2 | 1.2 | 21.2 | 2204.8 | -0.1 |
| 0111 0001 | 2194.38 | 2217.1 | 0.0 | 1.1 | 14.4 | 2220.6 | -1.5 |
| 0111 0000 | 2210.00 | 2238.2 | -1.2 | -1.2 | 19.1 | 2235.5 | 1.7 |
| | | | | | | | |
| 0110 1111 | 2225.63 | 2246.2 | -1.1 | -1.1 | 8.0 | 2252.4 | -6.2 |
| 0110 1110 | 2241.25 | 2262.1 | 1.3 | -0.1 | 15.9 | 2268.3 | -6.1 |
| 0110 1101 | 2256.88 | 2285.6 | 1.0 | 1.1 | 23.4 | 2284.1 | 1.4 |
| 0110 1100 | 2272.50 | 2306.3 | -1.1 | 0.1 | 20.7 | 2300.0 | 6.3 |
| 0110 1011 | 2288.13 | 2311.1 | -1.1 | -1.1 | 4.8 | 2315.9 | -4.8 |
| 0110 1010 | 2303.75 | 2330.3 | 0.0 | -1.1 | 19.1 | 2331.8 | -1.5 |
| 0110 1001 | 2319.38 | 2345.6 | 1.1 | 1.1 | 15.3 | 2347.6 | -2.0 |
| 0110 1000 | 2335.00 | 2365.6 | -2.7 | 1.1 | 20.0 | 2363.5 | 2.1 |
| 0110 0111 | 2350.63 | 2372.5 | -1.1 | 0.0 | 6.9 | 2379.4 | -6.9 |
| 0110 0110 | 2366.25 | 2391.2 | -1.2 | -1.2 | 18.7 | 2395.3 | -4.0 |
| 0110 0101 | 2381.88 | 2411.9 | 1.1 | -0.1 | 20.7 | 2411.1 | 0.8 |
| 0110 0100 | 2397.50 | 2433.6 | 1.2 | 1.2 | 21.6 | 2427.0 | 6.6 |
| 0110 0011 | 2413.13 | 2436.1 | 0.1 | 1.1 | 2.5 | 2442.9 | -6.8 |

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THEMATIC MAPPER MUX UNIT TEST MODEL .. FLT. S/N PAGE 110
 02 08:42:07 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5-F A/D THRESHOLD TEST CRAND = 2. THE MUX UNIT IS



DEC 02 81

| A/D OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV)
LEVELS RATIO= 1:1
NOMINAL LOWER UPPER | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE
POINT DEVIATION | | | |
|-------------------------|------------------------|---|------------------------------------|--|------|--------|------|
| 0110 0010 | 2428.75 | 2458.7 | -1.2 | -1.2 | 22.6 | 2458.8 | -0.1 |
| 0110 0001 | 2444.38 | 2472.9 | -1.1 | -1.1 | 14.2 | 2474.6 | -1.7 |
| 0110 0000 | 2460.00 | 2485.6 | -0.9 | 0.1 | 12.6 | 2490.5 | -4.9 |
| 0101 1111 | 2475.63 | 2497.9 | 1.2 | 1.2 | 12.3 | 2506.4 | -0.5 |
| 0101 1110 | 2491.25 | 2515.8 | -1.3 | -0.1 | 17.9 | 2522.3 | -6.5 |
| 0101 1101 | 2506.88 | 2541.5 | -1.2 | -1.2 | 25.7 | 2538.1 | 3.3 |
| 0101 1100 | 2522.50 | 2556.7 | -0.1 | -1.2 | 15.2 | 2564.0 | 2.7 |
| 0101 1011 | 2538.13 | 2562.8 | 1.1 | 1.1 | 6.1 | 2569.9 | -7.9 |
| 0101 1010 | 2553.75 | 2581.5 | 1.1 | 1.2 | 18.6 | 2585.2 | -4.3 |
| 0101 1001 | 2569.38 | 2604.9 | -1.1 | -0.1 | 23.5 | 2601.6 | 3.3 |
| 0101 1000 | 2585.00 | 2616.0 | -1.2 | -1.1 | 11.1 | 2617.5 | -1.5 |
| 0101 0111 | 2600.63 | 2624.3 | 1.1 | 0.0 | 8.3 | 2633.4 | -9.1 |
| 0101 0110 | 2616.25 | 2642.7 | 1.1 | 1.0 | 18.4 | 2649.2 | -6.6 |
| 0101 0101 | 2631.88 | 2664.9 | 0.1 | 1.1 | 22.2 | 2665.1 | -0.2 |
| 0101 0100 | 2647.50 | 2685.0 | -1.2 | -1.2 | 20.0 | 2681.0 | 4.0 |
| 0101 0011 | 2663.13 | 2690.2 | -1.1 | -1.1 | 5.3 | 2696.9 | -6.6 |
| 0101 0010 | 2678.75 | 2709.9 | 1.3 | 0.1 | 19.6 | 2712.2 | -2.9 |
| 0101 0001 | 2694.38 | 2724.7 | 1.1 | 1.1 | 14.8 | 2728.6 | -4.0 |
| 0101 0000 | 2710.00 | 2746.4 | -1.2 | -0.0 | 21.7 | 2744.5 | 1.9 |
| 0100 1111 | 2725.63 | 2752.0 | -1.2 | -1.1 | 5.6 | 2750.4 | -0.4 |
| 0100 1110 | 2741.25 | 2768.6 | 0.0 | -1.2 | 16.6 | 2776.2 | -7.6 |
| 0100 1101 | 2756.88 | 2793.3 | -0.7 | 1.1 | 24.7 | 2792.1 | 1.2 |
| 0100 1100 | 2772.50 | 2811.2 | 1.1 | 1.1 | 17.9 | 2808.0 | 3.2 |
| 0100 1011 | 2788.13 | 2816.9 | -1.1 | 0.0 | 5.2 | 2823.9 | -7.0 |
| 0100 1010 | 2803.75 | 2835.6 | -1.1 | -1.1 | 18.7 | 2839.2 | -1.2 |
| 0100 1001 | 2819.38 | 2856.8 | -4.5 | -0.1 | 21.2 | 2855.6 | 1.2 |

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HS-236 THEMATIC MAPPER MUX UNIT TEST MODEL., FLT. S/N PAGE 111
 1981/12/02 08:42:10/ PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MARGIN HIGH BUS
 3.5+13.5-4 A/D THRESHOLD TEST (CHANN= 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000)



| HRESHOLD A/D OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | BEST FIT STRAIGHT LINE | |
|---|------------------------|---------------------------|----------------------------|-------|------------------------------------|------------------------|-----------|
| | | NOMINAL | LEVELS RATIO= 1:1
LOWER | UPPER | | POINT | DEVIATION |
| 184 | 0100 1000 | 2835.00 | 2873.2 | 1.2 | 1.2 | 2871.5 | 1.8 |
| 185 | 0100 0111 | 2850.63 | 2877.3 | 0.0 | 1.1 | 2887.4 | -10.0 |
| 186 | 0100 0110 | 2866.25 | 2896.9 | -1.2 | -1.3 | 2903.2 | -6.4 |
| 187 | 0100 0101 | 2881.88 | 2919.0 | -1.1 | -1.1 | 2919.1 | -0.1 |
| 188 | 0100 0100 | 2897.50 | 2940.7 | 1.1 | -0.1 | 2965.0 | 5.7 |
| 189 | 0100 0011 | 2913.13 | 2942.2 | 1.1 | 1.2 | 2960.9 | -8.6 |
| 190 | 0100 0010 | 2928.75 | 2964.3 | -1.2 | -0.1 | 2966.7 | -2.5 |
| 191 | 0100 0001 | 2944.38 | 2979.0 | -1.2 | 4.4 | 2982.6 | -3.6 |
| 192 | 0100 0000 | 2960.00 | 2992.9 | 0.0 | -1.1 | 2998.5 | -1.5 |
| 193 | 0011 1111 | 2975.63 | 3005.4 | 1.1 | 1.1 | 3014.4 | -8.9 |
| 194 | 0011 1110 | 2991.25 | 3021.7 | 1.2 | 1.1 | 3030.2 | -8.5 |
| 195 | 0011 1101 | 3006.88 | 3049.2 | -1.2 | 0.0 | 3046.1 | 3.1 |
| 196 | 0011 1100 | 3022.50 | 3063.8 | -1.3 | -1.3 | 3062.0 | 1.8 |
| 197 | 0011 1011 | 3038.13 | 3070.7 | 1.1 | 0.0 | 3077.8 | -7.1 |
| 198 | 0011 1010 | 3053.75 | 3088.9 | 1.2 | 1.2 | 3093.7 | -4.9 |
| 199 | 0011 1001 | 3069.38 | 3112.4 | -0.1 | 0.9 | 3109.6 | 2.8 |
| 200 | 0011 1000 | 3085.00 | 3120.5 | -1.2 | -1.2 | 3121.5 | -5.0 |
| 201 | 0011 0111 | 3100.63 | 3133.7 | -1.1 | -1.0 | 3141.3 | -7.7 |
| 202 | 0011 0110 | 3116.25 | 3150.6 | 1.1 | -0.1 | 3157.2 | -6.6 |
| 203 | 0011 0101 | 3131.88 | 3173.9 | 0.9 | 1.1 | 3173.1 | 0.8 |
| 204 | 0011 0100 | 3147.50 | 3192.8 | -1.1 | 0.0 | 3189.0 | 1.9 |
| 205 | 0011 0011 | 3163.13 | 3199.0 | -1.2 | -1.2 | 3204.8 | -1.8 |
| 206 | 0011 0010 | 3178.75 | 3219.8 | -0.1 | -1.3 | 3220.7 | -0.9 |
| 207 | 0011 0001 | 3194.38 | 3239.7 | 1.0 | 1.0 | 3236.6 | 3.2 |
| 208 | 0011 0000 | 3210.00 | 3253.0 | -5.0 | 1.0 | 3252.5 | 0.5 |
| 209 | 0010 1111 | 3225.63 | 3261.2 | -1.1 | 0.0 | 3268.3 | -7.1 |

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| THRESHOLD
NUMBER | A/D
THRESHOLD | OUTPUT
THRESHOLD | IDEAL
VALUE
(MV) | ANALOG
NOMINAL | INPUT VOLTAGE
LEVELS
LOWER | INPUT VOLTAGE
RATIO= 1:1
UPPER | INCREASE
FROM PREVIOUS
THRESHOLD | BEST FIT STRAIGHT LINE
POINT | DEVIATION |
|---------------------|------------------|---------------------|------------------------|-------------------|----------------------------------|--------------------------------------|--|---------------------------------|-----------|
| 210 | 0010 | 1110 | 3241.25 | 3277.6 | -1.2 | -1.1 | 16.4 | 3234.2 | -6.6 |
| 211 | 0010 | 1101 | 3256.88 | 3302.9 | 1.0 | 0.0 | 25.3 | 3300.1 | 2.8 |
| 212 | 0010 | 1100 | 3272.50 | 3320.5 | 1.1 | 1.1 | 17.6 | 3316.0 | 4.5 |
| 213 | 0010 | 1011 | 3288.13 | 3325.6 | 0.0 | 1.1 | 5.1 | 3331.8 | -6.2 |
| 214 | 0010 | 1010 | 3203.75 | 3345.0 | -1.2 | -1.1 | 19.4 | 3337.2 | -2.2 |
| 215 | 0010 | 1001 | 3319.38 | 3368.3 | -1.1 | -1.1 | 23.3 | 3363.6 | 4.2 |
| 216 | 0010 | 1000 | 3335.00 | 3381.9 | 1.1 | -0.0 | 13.5 | 3329.5 | 2.4 |
| 217 | 0010 | 0111 | 3350.63 | 3387.7 | 1.1 | 1.2 | 5.8 | 3391.1 | -7.2 |
| 218 | 0010 | 0110 | 3366.25 | 3407.0 | -1.3 | -0.1 | 19.1 | 3411.2 | -4.2 |
| 219 | 0010 | 0101 | 3381.88 | 3430.0 | -1.1 | -1.1 | 23.1 | 3422.1 | 3.0 |
| 220 | 0010 | 0100 | 3397.50 | 3451.5 | 0.0 | -1.0 | 21.5 | 3443.0 | 8.6 |
| 221 | 0010 | 0011 | 3413.13 | 3453.3 | 1.0 | 1.0 | 1.7 | 3448.8 | -1.5 |
| 222 | 0010 | 0010 | 3428.75 | 3473.8 | 1.0 | 1.1 | 20.5 | 3424.2 | -0.9 |
| 223 | 0010 | 0001 | 3444.38 | 3496.1 | -1.1 | 0.1 | 22.3 | 3490.6 | 5.6 |
| 224 | 0010 | 0000 | 3460.00 | 3506.3 | -1.4 | -1.3 | 10.1 | 3506.4 | -0.2 |
| 225 | 0001 | 1111 | 3475.63 | 3515.8 | 1.0 | 0.0 | 9.5 | 3522.1 | -6.5 |
| 226 | 0001 | 1110 | 3491.25 | 3531.9 | 1.1 | 1.1 | 16.1 | 3538.2 | -6.1 |
| 227 | 0001 | 1101 | 3506.88 | 3558.7 | -0.1 | 1.1 | 26.8 | 3524.1 | 4.6 |
| 228 | 0001 | 1100 | 3522.50 | 3575.0 | -1.3 | -1.2 | 16.1 | 3539.9 | 5.0 |
| 229 | 0001 | 1011 | 3538.13 | 3582.8 | -1.2 | -1.1 | 7.9 | 3580.8 | -3.0 |
| 230 | 0001 | 1010 | 3553.75 | 3599.5 | 1.1 | 0.0 | 16.6 | 3601.2 | -2.2 |
| 231 | 0001 | 1001 | 3569.38 | 3623.4 | 0.9 | 1.0 | 24.0 | 3612.6 | 5.9 |
| 232 | 0001 | 1000 | 3585.00 | 3632.6 | -1.3 | -0.1 | 9.1 | 3633.4 | -0.9 |
| 233 | 0001 | 0111 | 3600.63 | 3645.1 | -1.1 | -1.1 | 12.5 | 3649.3 | -4.2 |
| 234 | 0001 | 0110 | 3616.25 | 3663.1 | -0.1 | -1.3 | 12.9 | 3665.2 | -2.1 |
| 235 | 0001 | 0101 | 3631.88 | 3687.6 | 0.9 | 1.1 | 24.5 | 3681.1 | 6.5 |
| 236 | 0001 | 0100 | 3647.50 | 3703.9 | 1.1 | 1.3 | 16.1 | 3696.9 | 2.0 |

3-236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N PAGE 113
 281/12/02 08:42:02 PENALTY ACCEPTANCE @ AMBIENT TEMP. VOLTAGE MAGNITUDE HIGH FLS
 3.3.5-4 A/D THRESHOLD TEST (RANGE 2) SE-N-SC-1



0 02 '01

| THRESHOLD A/D OUTPUT
NUMBER THRESHOLD | IDEAL
VALUE
(MV) | ANALOG INPUT VOLTAGE (MV) | | | INCREASE
FROM PREV
THRESHOLD | PERCENT STRAIGHT LINE | |
|--|------------------------|---------------------------|------------------------------------|-------|------------------------------------|-----------------------|--|
| | | NOMINAL | LEVELS RATIO= 1 : 1
LOWER UPPER | ERROR | | DEVIATION | |
| 237 0001 0011 | 3663.13 | 3711.1 | -1.2 -0.0 | 7.1 | 3712.8 | -1.7 | |
| 238 0001 0010 | 3678.75 | 3731.4 | -1.3 -1.0 | 20.3 | 3738.7 | 7.7 | |
| 239 0001 0011 | 3694.38 | 3751.9 | 1.0 0.0 | 20.5 | 3744.6 | 7.9 | |
| 240 0001 0000 | 3710.00 | 3769.4 | 1.1 1.2 | 17.5 | 3760.4 | 8.2 | |
| 241 0000 1111 | 3725.63 | 3772.7 | -0.0 1.1 | 3.3 | 3776.3 | -9.6 | |
| 242 0000 1110 | 3741.25 | 3790.0 | -1.3 -1.2 | 17.3 | 3792.2 | -2.2 | |
| 243 0000 1101 | 3756.88 | 3816.8 | -1.2 -1.0 | 26.8 | 3808.1 | 8.8 | |
| 244 0000 1100 | 3772.50 | 3833.7 | 1.1 0.1 | 16.8 | 3839.2 | 9.7 | |
| 245 0000 1011 | 3788.13 | 3838.8 | 1.0 1.2 | 5.1 | 3839.8 | -1.0 | |
| 246 0000 1010 | 3803.75 | 3857.9 | -1.2 0.0 | 19.1 | 3855.7 | 2.2 | |
| 247 0000 1001 | 3819.38 | 3881.6 | -1.1 -1.1 | 23.7 | 3871.6 | 10.1 | |
| 248 0000 1000 | 3835.00 | 3898.7 | -0.1 -1.3 | 17.1 | 3887.4 | 11.3 | |
| 249 0000 0111 | 3850.63 | 3901.4 | 1.1 1.2 | 2.7 | 3903.3 | -1.9 | |
| 250 0000 0110 | 3866.25 | 3919.2 | 1.1 1.1 | 17.8 | 3919.2 | 0.1 | |
| 251 0000 0101 | 3881.88 | 3946.2 | -1.2 0.1 | 26.9 | 3935.0 | 11.1 | |
| 252 0000 0100 | 3897.50 | 3966.8 | -1.2 -1.2 | 20.6 | 3950.9 | 15.9 | |
| 253 0000 0011 | 3913.13 | 3967.4 | 1.1 0.0 | 0.6 | 3966.8 | 0.7 | |
| 254 0000 0010 | 3928.75 | 3987.9 | 1.0 1.1 | 20.5 | 3982.7 | 5.2 | |
| 255 0000 0001 | 3944.38 | 4009.5 | -0.2 1.1 | 21.6 | 3998.1 | 11.9 | |

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Appendix A

Multiplexer Performance Data

CROSS-TALK TEST DATA
Per FR 4268

Section 11

-236 THEMATIC MAPPER MUX UNIT TEST MODEL .. FLT. S/N 3 PAGE 114
 11/12/02 10:50:24 PENALTY TEST TO VERIFY FR # F4268 FAILURE @ +15°C Rg 12/2/81
 1.5-7.5-13.5-14 CROSS-TALK TEST
 DAC OFFSET S/E +/- 10 MV, IS -0.0001 V FOR INFORMATION ONLY
 THRESHOLD S/E 16 TO 80 MV, IS 0.0465 V FOR INFORMATION ONLY
 -10 MV S/E (?) - 10 MV +/- 1 MV, IS 0.0365 V FOR INFORMATION ONLY
 DIGITAL PATTERN FOR DAC IN HEX IS 0742 FOR INFORMATION ONLY
 (ST ROW IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE <= 1, IF FAILED SEE SECOND ROW
 (2ND ROW IS COUNT OF ALL FAILED VALUE, ACCEPTABLE VALUE IS = 0 FOR B1-0, 2, 1, FOR F4



DEC 02 '81

DEC 02 '81

S F N S O R

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

1 PASSED

*Retest of xtalk to verify failure report # F4268 as
 a test equipment malfunction not a unit failure.*

*See Q.C.H.R.
 Sheet #14 LINC #2*



Rg 12/10/81

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236 THEMATIC MAPPER MUX UNIT TEST MODEL.. FLT. S/N 3 PAGE 115
 11/12/02 10:54:03 PENALTY TEST TO VERIFY FR # F4268 FAILURE @ +15°C Rg 12/2/81
 3.5.3.4-3 CROSS-TALK TEST (RAN) 3 SENSITIVE
 DAC OFFSET S/E +/- 10 MV, IS -0.0001 V FOR INFORMATION ONLY
 THRESHOLD S/E 14 TO 80 MV, IS 0.0464 V FOR INFORMATION ONLY
 -10 MV S/E (?) - 10 MV +/- 1 MV, IS 0.0364 V FOR INFORMATION ONLY
 DIGITAL PATTERN FOR DAC IN HEX IS 0240 FOR INFORMATION ONLY
 1ST ROW IS HIGHEST VALUE FOUND, ACCEPTABLE VALUES ARE <= 1, IF FAILED SEE SECOND ROW
 2ND ROW IS COUNT OF ALL FAILED VALUE, ACCEPTABLE VALUE IS <= 30 FOR E1-5, 7, 15 FOR E6

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DEC 02 '81

S E N S O R

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | |

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Retest #2, Same reason as Pg 117. Rg 12/2/81
 See Q.C.H.R. Sheet #14 Line #2

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Appendix A

Multiplexer Performance Data

SERIAL DATA AND BIT CLOCK PARAMETERS

Section 12

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TP J2015-005
04 SEP 1980

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12 AUG 81
S 4-47
2/2/81

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ITA SHEET

3.6.2.2 Serial Data and Bit Clock Parameters

| SIGNAL | CONNECTOR | SCOPE | PIN NO. | INPUT | LOGIC "0" | LOGIC "1" | TRANSITION TIMES | |
|----------------------|-----------|-------|---------|-------|-----------------|-----------------|------------------|-------------|
| | | | | | | | 20% to 80% | REQ: 83.5ns |
| | | | | | -0.46 to -1.36V | +0.46 to +1.36V | tr | tf |
| 1. Output NRZ-1 Data | | | | | | | | |
| | MX15B01T | J5-1 | + | | -1.5 | +1.5 | 2.0 | 2.0 |
| | B01F | J5-2 | - | | | | | |
| 2. Backup | MX15B02T | J6-1 | + | | -1.5 | +1.5 | 2.2 | 2.0 |
| | B02F | J6-2 | - | | | | | |
| 3. Output Bit Clock | MX15B03T | J7-1 | + | | -1.5 | +1.5 | 3.1 | 3.0 |
| | B03F | J7-2 | - | | | | | |
| 4. Backup | MX15B04T | J8-1 | + | | -1.5 | +1.5 | 3.2 | 3.0 |
| | B04F | J8-2 | - | | | | | |

Test passed. By 12/2/81

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DATA SHEET

3.5.2.2 Serial Data and Bit Clock (Cont).

| PARASITIC | | | | | | | |
|----------------------|--|-----------------------------------|-----|-----------------------------------|-----|-----------------------------------|----|
| | | Delay from + edge of Clock to t13 | | Delay from + edge of Clock to t23 | | Delay from + edge of Clock to t14 | |
| | | t13 | | t23 | | t14 | |
| SIGNAL | | to + edge | | t13- t23 to + edge | | to + edge | |
| | | 0 to 4.5ns | | +1.0ns | | 0 to 4.5ns | |
| 1. OUTPUT VRZ-L Data | | 4.0 | 3.9 | .1 | 4.0 | 3.5 | .5 |
| | | MX15R01T | | | | | |
| | | FO1F | | | | | |
| 2. " " | | 4.2 | 4.0 | .2 | 3.8 | 3.6 | .2 |
| | | MX15R02T | | | | | |
| | | FO2F | | | | | |
| 3. OUTPUT Bit Clock | | MX15R03T | | 1.1 | | 1.0 | * |
| | | FO3F | | | | | |
| 4. " " | | 1.1 | 1.0 | * | | | * |
| | | MX15R04T | | | | | |
| | | FO4F | | | | | |

Frequency of Output Bit Clock MX15R03T: 848915 MHz
Reqm't. : 81.8141 to 84.9379 MHz

* For Reference only.

Test passed by 12/2/81



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TP 32015-005
04 SEP 1980

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3.6.3 Dynamic TTL Output Signal Parameters



REC 12 '81

DATA SHEET

| SIGNAL | | SC | CH1 | GRP | LOGIC "0" | LOGIC "1" |
|---------------------------------|----------|----|-----|-----|--------------|-------------|
| | | | | | 10.0 to 0.4V | 2.4 to 5.0V |
| 1. S/C Telemetry Data Request, | MX15B10T | 6 | | 3A | .1 | 3.5 |
| " | F | 6 | | 3A | .1 | 3.5 |
| 2. S/C Time Code Read Clock, | MX15B11T | 6 | | 1A | .1 | 3.6 |
| " | F | 6 | | 1A | .1 | 3.6 |
| 3. S/C Time Code Read Envelope, | MX15B05T | 5 | | 1A | .1 | 3.8 |
| " | F | 5 | | 1A | .1 | 3.8 |
| 4. Line Length Code Read Clock, | MX15B08T | 6 | | 2A | .15 | 3.5 |
| " | F | 6 | | 2A | .15 | 3.5 |
| 5. Buffered Line Stop, | MX15B16T | 5 | | 5A | .1 | 3.6 |
| " | F | 5 | | 5A | .1 | 3.6 |
| 6. " , Backup, | MX15B15T | 5 | | 5B | .1 | 3.8 |
| " | F | 5 | | 5B | .1 | 3.8 |
| 7. Line Stop Delayed #1, | MX15B06T | 6 | | 4A | .1 | 3.6 |
| " | F | 6 | | 4A | .1 | 3.6 |
| 8. " #2, | MX15B17T | 6 | | 5A | .1 | 3.7 |
| " | F | 6 | | 5A | .1 | 3.7 |
| | | | | | 0 to 0.65V | 2.47 to 5.5 |
| | | | | | when sink- | V when |
| | | | | | ing ≤20ma | supplying |
| | | | | | | ±1ma |
| 9. Line Sync Envelope, | MX11G04F | 4 | | 1A | .2 | 3.6 |

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TEST

3 (Continued)

DATA SHEET

| SIGNAL | SC | CH | LOGIC | LOGIC | FREQUENCY | DUTY CYCLE | DUTY CYCLE |
|-----------------------|-----------|----|--------------|-------------|----------------------|-------------|-------------|
| | | | 10.0 TO 0.4V | 2.4 TO 5.0V | 206.01 TO 210.17 KHZ | MEASUREMENT | REQUIREMENT |
| Calibrator Clock, | MX15R07T | 5 | 4A | 0.1 | 3.8 | 208.05 | 59 |
| | F15 | 4A | 0.1 | 4.0 | 208.05 | 40.5 | 57 TO 618 |
| | | | | | | | 40 TO 428 |
| | MX15R18T | 5 | 4B | 0.1 | 3.9 | 208.06 | 59 |
| | F15 | 4B | 0.1 | 3.9 | 208.06 | 40.5 | 57 TO 618 |
| | | | | | | | 40 TO 428 |
| Power Converter Sync, | MX15R12T | 5 | 2A | 0.1 | 4.0 | 208.06 | 59 |
| | F15 | 2A | 0.0 | 4.0 | 208.06 | 40.6 | 57 TO 618 |
| | | | | | | | 40 TO 428 |
| | Backup 81 | | | | | | |
| | MX15R13T | 5 | 2B | 0.1 | 3.9 | 208.06 | 59 |
| | F15 | 2B | 0.1 | 4.0 | 208.06 | 40.5 | 57 TO 618 |
| | | | | | | | 40 TO 428 |
| | Backup 82 | | | | | | |
| | MX15R14T | 5 | 3B | 0.1 | 4.0 | 208.06 | 59 |
| | F15 | 3B | 0.1 | 3.9 | 208.06 | 40.5 | 57 TO 618 |
| | | | | | | | 40 TO 428 |

Test passed Reg 12/2/81



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DATA SHEET

4 Mirror Drive Clock Signal Parameters

| SIGNAL | SC | CH1 GRP | LOGIC "0" | LOGIC "1" | FREQUENCY | DUTY CYCLE |
|----------------------|----------|---------|---------------|-----------|----------------------|------------|
| | | | -0.3 to +0.3V | +5.0V | 10.507 to 10.718 kHz | 40% to 60% |
| Mirror Driver Clock, | MX15B09T | 5 | 6A | 4.9 | 10.612 | 45 |
| | FI 5 | 6A | -0.12 | 4.9 | 10.612 | 55 |
| | MX15D19T | 5 | 6A | 4.9 | 10.612 | 45 |
| | FI 5 | 6B | -0.12 | 4.9 | 10.612 | 55 |

Test passed Aug 17/81

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Para 3.6.2.2,

$i = 7 \quad 2 = -$

JS

1-A
7-1
S27

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18. 0 3

Ts

TE

18. 0 4 81

HAC
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DEC 7 2 '81

AC
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21

DEC 9 2 18 PM '88

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HS-
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E.

THRE
NU

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14.
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FLI MUX 5/103

Para 3.6.2.2

siggle M-FM T.R

1 = + , 2 = -

py
17/2/81

HAC
11 ST
S27

DEC 02 '81

HS-2
1981
3 + 5

THRE S
NUM

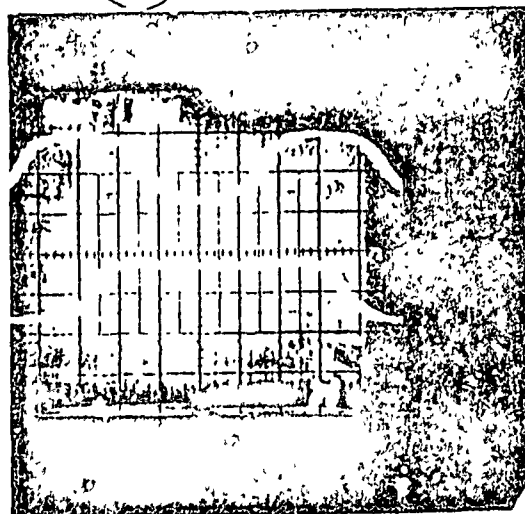
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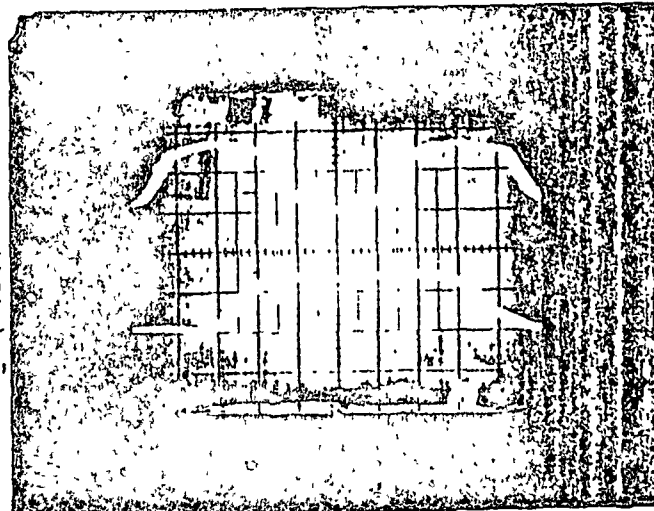
17
17
17
18
18
18

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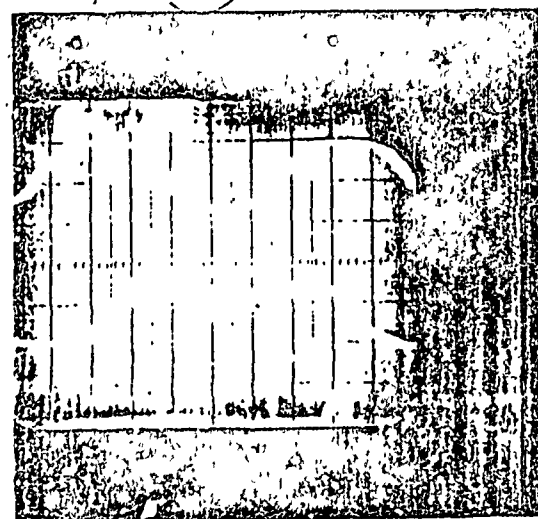
HAC
11 ST
S27

DEC 02 '81



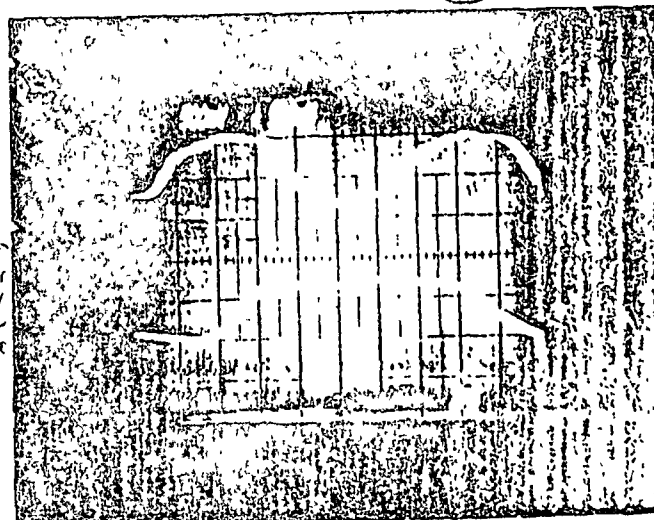
HAC
11 ST
S27

DEC 02 '81



HAC
11 ST
S27

DEC 02 '81



HAC
11 ST
S27

DEC 02 '81

FLT MUX S/N3

Para 3.6.2.2

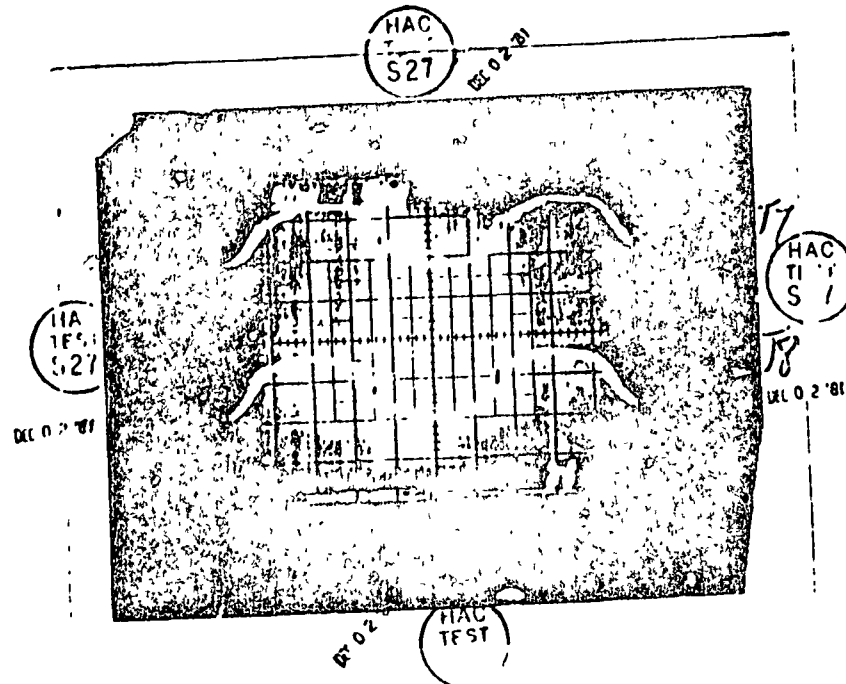
Juggle MAFM TP

1 = 1 ; 2 = -

py 12/2/81



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Appendix A

Multiplexer Performance Data

WIRE CHECK DATA SHEETS

Section 13

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WIRECHECK DATA SHEET

TABLE 3.3.2
CONTINUITY/ISOLATION MEASUREMENTS

| Item | Location/
Pin No. | Signal | Location/
Pin No. | Signal | Indication
(Ohms) | Verify
(V) |
|------|----------------------|----------|----------------------|----------|----------------------|-----------------|
| 1 | J01-01 | MX15B10T | J01-02 | MX15B10T | <1 | ✓ |
| 2 | J01-03 | MX15B10F | J01-04 | MX15B10F | <1 | ✓ |
| 3 | J01-05 | MX15B11T | J01-06 | MX15B11T | <1 | ✓ |
| 4 | J01-07 | MX15B11F | J01-08 | MX15B11F | <1 | ✓ |
| 5 | J01-09 | MX15B05T | J01-10 | MX15B05T | <1 | ✓ |
| 6 | J01-11 | MX15B05F | J01-12 | MX15B05F | <1 | ✓ |
| 7 | J01-13 | MX08R12T | J01-14 | MX08R12T | <1 | ✓ |
| 8 | J01-15 | MX08R12F | J01-16 | MX08R12F | <1 | ✓ |
| 9 | J01-28 | MX08R01T | J01-29 | MX08R01T | <1 | ✓ |
| 10 | J01-30 | MX08R01F | J01-31 | MX08R01F | <1 | ✓ |
| 11 | J01-32 | MX08R02T | J01-33 | MX08R02T | <1 | ✓ |
| 12 | J01-34 | MX08R02F | J01-35 | MX08R02F | <1 | ✓ |
| 13 | J01-36 | MX08R03T | J01-37 | MX08R03T | <1 | ✓ |
| 14 | J01-38 | MX08R03F | J01-39 | MX08R03F | <1 | ✓ |
| 15 | J01-40 | MX08R04T | J01-41 | MX08R04T | <1 | ✓ |

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WIRECHECK DATA SHEET (Continued)

TABLE 3.3.2
CONTINUITY/ISOLATION MEASUREMENTS

| Item | Location/
Pin No. | Signal | Location/
Pin No. | Signal | Indication
(Ohms) | Verify
(V) |
|------|----------------------|-------------|----------------------|-------------|----------------------|-----------------|
| 16 | J01-42 | MX08R04F | J01-43 | | <1 | ✓ |
| 17 | J01-44 | MX08R05T | J01-45 | | <1 | ✓ |
| 18 | J01-46 | MX08R05F | J01-47 | | <1 | ✓ |
| 19 | J01-48 | MX08R06T | J01-49 | | <1 | ✓ |
| 20 | J01-50 | MX08R06F | J01-51 | | <1 | ✓ |
| 21 | J01-52 | MX08R07T | J01-53 | | <1 | ✓ |
| 22 | J01-54 | MX08R07F | J01-55 | | <1 | ✓ |
| 23 | J01-56 | MX08R08T | J01-57 | | <1 | ✓ |
| 23 | J01-58 | MX08R08F | J01-59 | | <1 | ✓ |
| 25. | J01-61 | Chassis GND | Chassis | Chassis GND | <1 | ✓ |
| 26 | J03-11 | Sig RTN | J02-61 | | <1 | ✓ |
| 27 | J03-61 | Chassis GND | Chassis | Chassis GND | <1 | ✓ |
| 28 | J04-13 | Sig RTN | J02-61 | | <1 | ✓ |
| 29 | J04-14 | Sig RTN | J02-61 | | <1 | ✓ |

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WIRECHECK DATA SHEET (Continued)

TABLE 3.3.2
CONTINUITY/ISOLATION MEASUREMENTS

| Item | Location/
Pin No. | Signal | Location/
Pin No. | Signal | Indication
(Ohms) | Verify
(V) |
|------|----------------------|-------------|----------------------|--------|----------------------|-----------------|
| 30 | J04-15 | Sig RTN | J02-61 | | <1 | ✓ |
| 31 | J04-47 | MX14A01F | J04-51 | | <1 | ✓ |
| 32 | J04-49 | MX14A02F | J04-53 | | <1 | ✓ |
| 33 | J04-55 | MX16A12A | J04-58 | | <1 | ✓ |
| 34 | J04-60 | Sig RTN | J02-61 | | <1 | ✓ |
| 35 | J04-61 | Chassis GND | Chassis | | <1 | ✓ |
| 36 | J09-D5 | MX15B08T | J09-E5 | | <1 | ✓ |
| 37 | J09-E3 | MX15B08F | J09-E4 | | <1 | ✓ |
| 38 | J09-K1 | Dig RTN | J02-61 | | <1 | ✓ |
| 39 | J09-P5 | Chassis GND | Chassis | | <1 | ✓ |
| 40 | J10-A1 | +30V Bus | J10-A2 | | <1 | ✓ |
| 41 | J10-A1 | +30V Bus | J10-C1 | | <1 | ✓ |
| 42 | J10-A1 | +30V Bus | J10-C2 | | <1 | ✓ |
| 43 | J10-A1 | +30V Bus | J10-F1 | | <1 | ✓ |
| 44 | J10-A1 | +30V Bus | J10-F2 | | <1 | ✓ |

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WIRECHECK DATA SHEET (Continued)

TABLE 3.3.2
CONTINUITY/ISOLATION MEASUREMENTS

| Item | Location/
Pin No. | Signal | Location/
Pin No. | Signal | Indication
(Ohms) | Verify
(V) |
|------|----------------------|-------------|----------------------|--------|----------------------|-----------------|
| 45 | J10-A1 | +30V Bus | J10-H1 | | <1 | ✓ |
| 46 | J10-A1 | +30V Bus | J10-H2 | | <1 | ✓ |
| 47 | J10-B1 | Bus RTN | J10-B2 | | <1 | ✓ |
| 48 | J10-B1 | Bus RTN | J10-D1 | | <1 | ✓ |
| 49 | J10-B1 | Bus RTN | J10-D2 | | <1 | ✓ |
| 50 | J10-B1 | Bus RTN | J10-E1 | | <1 | ✓ |
| 51 | J10-B1 | Bus RTN | J10-E2 | | <1 | ✓ |
| 52 | J10-B1 | Bus RTN | J10-G1 | | <1 | ✓ |
| 53 | J10-B1 | Bus RTN | J10-G2 | | <1 | ✓ |
| 54 | J10-P1 | Chassis GND | Chassis | | <1 | ✓ |
| 55 | J10-P2 | Chassis GND | Chassis | | <1 | ✓ |
| 56 | J13-A1 | MX08R22T | J13-A2 | | <1 | ✓ |
| 57 | J13-A3 | MX08R23T | J13-A4 | | <1 | ✓ |
| 58 | J13-C1 | MX08R17T | J13-C2 | | <1 | ✓ |
| 59 | J13-C3 | MX08R11T | J13-C4 | | <1 | ✓ |

Test passed Reg 12/2/81

12/2/81

WIRECHECK DATA SHEET (Continued)

ORIGINAL PAGE IS
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CONTINUITY/ISOLATION MEASUREMENTS

| Item | Location/
Pin No. | Signal | Location/
Pin No. | Signal | Indication
(Ohms) | Verify
(V) |
|------|----------------------|-------------|----------------------|-------------|----------------------|-----------------|
| 60 | J13-E1 | MX08R11F | J13-E2 | | <1 | ✓ |
| 61 | J13-E3 | 4X08R13T | J13-E4 | | <1 | ✓ |
| 62 | J13-G1 | MX08R13F | J13-G2 | | <1 | ✓ |
| 63 | J13-G3 | MX08R14T | J13-G4 | | <1 | ✓ |
| 64 | J13-H1 | MX08R14F | J13-H2 | | <1 | ✓ |
| 65 | J13-H3 | MX08R15T | J13-H4 | | <1 | ✓ |
| 66 | J13-M1 | MX06R05T | J13-M2 | | <1 | ✓ |
| 67 | J13-P5 | Chassis GND | Chassis | | <1 | ✓ |
| 68 | J02-61 | Sig RTN | Chassis | Chassis GND | >100K | ✓ |
| 69 | J02-61 | Sig RTN | J10-A1 | +30V Bus | >100K | ✓ |
| 70 | J02-61 | Sig RTN | J10-B1 | Bus RTN | >100K | ✓ |
| 71 | J10-B1 | Bus RTN | Chassis | Chassis GND | >100K | ✓ |
| 72 | J10-B1 | Bus RTN | J10-A1 | +30V Bus | >10K | ✓ |
| 73 | J10-A1 | +30V Bus | Chassis | Chassis GND | >100K | ✓ |

Test passed by 12/4/81



12/4/81